The Milroy Lectures

ON

THE NATURAL HISTORY OF VACCINIA.

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LECTURE III.[1]

Delivered on May 10th.

ANIMAL VACCINATION.

MR. PRESIDENT, CENSORS, AND GENTLEMEN,—By the term "animal vaccination" as it is now applied is meant the employment for the vaccination of the human subject of the virus of cow-pox as propagated upon a succession of calves or heifers, the original virus having been derived from pocks upon the cow spontaneously affected with the natural disease. The late Dr. Ballard in his prize essay on Vaccination gives a most interesting and valuable historical account of the introduction of the practice. In this essay he states that the practice of animal vaccination appears to have originated with M. Negri in Naples, who was seemingly the first to propagate natural cow-pox by successive inoculations upon the heifer. Prior to his time, says Dr. Ballard, cows had been, in various places and by various persons, inoculated with vaccine virus derived from the human subject, the lymph obtained from pocks thus produced being used for human vaccinations. This practice has been termed "retro-vaccination." There appears to be no great difficulty or uncertainty attending retro-vaccination so long as animals sufficiently young are made its subjects and the human lymph is taken under circumstances favourable to its activity. The general result of reinoculation of it upon the human subject has been that the character and activity of the virus thus retransferred remained unaffected by its transmission through the system of the cow. This was the practice first pursued at Naples by Troja in 1805 shortly after the introduction of vaccination into Italy, and also pursued by his successor Galbiati. When, however, M. Negri, in 1842, succeeded to the practice on the death of Galbiati, he soon gave up retro-vaccination and began to propagate the virus by inoculation from one cow to another, that first propagated being of human origin. Subsequently, on the occasion of an outbreak of cow-pox in Calabria the use of this virus was abandoned and M. Negri propagated thenceforth that obtained from the natural cow-pox. It is said that on two occasions he thus availed himself of natural cow-pox matter obtained in Italy but that on a third occasion, in 1858, on which he renewed his supply, it was derived from London.

A good deal of doubt has been thrown upon the origin of this third renewal of virus and it has been questioned whether it was virus from natural cow-pox at all. However, it appears that it is this virus which M. Negri propagated subsequently to 1858. In 1864 M. Lanoix, a young French physician, visited Naples in order to study the practice of animal vaccination as pursued there. On his return he brought back with him to Paris a calf inoculated with the virus then in process of transmission by M. Negri, and in concert with M. Chambon he set up a private establishment for the propagation of the virus from calf to calf, and for the supply of animal vaccine in Paris. In his report on vaccination in France during 1864 M. Depaul, in the name of the Academie de Médecine, gave an account of the observations made in Paris on this subject, and in February, 1866, the French Government placed a sum of 6000 francs at the disposal of the Académie for the purpose of experiment in the matter. A Commission was appointed, the report of which was drawn up by M. Depaul. This report was favourable to the practice of animal vaccination. The Commission, however, were much divided in opinion, and the Académie did not then recommend that the practice should be adopted. At first the virus used by the Commission was that in use by MM. Lanoix and Chambon, and which they had previously obtained from Naples. But after four transmissions of this lymph had been made, a new source of virus from natural cow-pox was discovered at Beaugency (Loiret), and then the use of the Neapolitan strain was abandoned and this new and undoubted cow-pox virus was alone employed. MM. Lanoix and Chambon also adopted the use of this strain to the exclusion of that which they had before employed, and having in the autumn of the same year (1866) met with another case of natural cow-pox at St. Mandé, near Paris, they introduced this lymph also into their practice of animal vaccination. They saw no advantage in keeping these two lymphs distinct, and the strain which they have employed from 1866 onwards is a mixture of the two natural sources discovered at Beaugency and at St. Mandé.

Whatever the origin of the Neapolitan virus may have been therefore there can be no question that the inoculations made by the Commission (after the first four) and those afterwards made in Paris by MM. Lanoix and Chambon were transmissions of the virus of a cow-pox of spontaneous origin. From Paris the practice of animal vaccination extended in many directions. Thus in February, 1865, it was introduced into Brussels by Dr. Warlomont, whose first supply of lymph was obtained from M. Lanoix (Neapolitan source). At a later period he obtained from Paris virus in course of propagation from the Beaugency source, and still later he introduced a third source obtained in July, 1868, at Esneux (Liège). In September, 1866, at the request of the Minister of the Interior the Royal Academy of Belgium referred the whole question to a Commission consisting of MM. Bellefroid, Thieruesse, and Marinas, who reported favourably upon it. And, in consequence, in July, 1868, an "Institut Vaccinal de l'État" was established at Brussels, under the direction of Dr. Warlomont, for maintaining the practice of animal vaccination and distributing gratuitously lymph obtained from the animals or lymph taken from children who had been vaccinated direct from the animals, according to the preference of the vaccinators or other practitioners demanding it. The practice was introduced into Berlin by Dr. Pissin in June, 1865, and the establishment which he founded is still carried on as a private speculation. Animal vaccination appears to have been introduced into Vienna in a similar manner about the same time and many of the great capitals of Europe rapidly followed suit. Thus early in 1868 the Society for Promotion of Cow-pox Inoculation at Rotterdam determined to open a station for the practice of animal vaccination and they commenced operations in April of that year, distributing lymph throughout Holland and its colonies. A similar course was adopted in the following year by the corresponding society of Amsterdam.

Switzerland also owes the comparatively recent introduction of animal vaccination into that country to private enterprise, what is now known as the Institut Vaccinal Suisse having been founded in 1882 by M. Charles Haccius, the present Director of the establishment. Originally a private venture, the institute, which is situated at Lancy on the outskirts of Geneva, is now recognised by the various cantonal governments, M. Haccius, in consideration of an annual subvention, supplying to public vaccinators throughout Switzerland, free of cost, all the lymph required by them in the performance of their duties. This establishment I have recently (1897) had the opportunity of visiting in the course of a tour of inspection at the instance of the Government of certain of the chief calf vaccine establishments on the Continent of Europe. At Paris we found that, as is the case with the establishment of M. Haccius at Lancy, the Institut de Vaccine Animale is practically a private concern, although the municipality of the city of Paris contract with the Directors to carry out all such public vaccinations within their jurisdiction as may be necessary. This institution, which is now carried on by M. Chambon and Dr. St. Yves Ménard, was founded, as already mentioned, by M. Lanoix. Originally situated in the Rue Massillon, it was subsequently transferred to the Rue Ballu, where what was formerly a dwelling-house has been adapted to its present purpose.

In Germany all the establishments visited by Sir Richard Thorne and myself, at Berlin, Dresden, and Cologne respectively, are under Government control. Of these, that at

[1] This lecture was illustrated by means of a lantern demonstration. Lectures I. and II. were published in THE LANCET of May 7th and 14th, 1898, respectively.

Cologne is the most recent of its kind and its buildings with their fittings are of the most modern description. This institution, of which Dr. Vanselow is the Director, was erected in 1889 for the production of animal lymph to meet the needs of the Rhine province and Hohenzollern districts. The building adjoins the central meat market, a matter of convenience for the obtaining and subsequent disposal of calves. On the ground floor of the building are the collecting room, calf stable, slaughter room, director's and clerks' rooms, corridors, and offices; while on the first floor is a bacteriological laboratory, fitted up with all needful apparatus, which is reached from the collecting room by an iron spiral staircase. At Brussels the propagation, storage, and distribution of calf lymph is carried out at the Ecole Vétérinaire under the supervision of Professor Dégive, the Director of the establishment. The accommodation provided in the present building is regarded as very insufficient for the purpose and accordingly, as Professor Dégive informed us, a new vaccinal institute is about to be erected in the construction of which all modern scientific requirements will be amply provided for. The private establishment originally founded by Dr. Warlomont and which is now carried on by his son-in-law, an officer in the Belgian Army, we had not the opportunity of visiting.

Although the practice of animal vaccination is now practically universal throughout Europe, in England up to the present time it has been employed to a very limited extent. At the Government Animal Vaccine Establishment at Lamb's Conduit-street, which was founded in 1881 as the result of investigations by the late Sir George (then Dr.) Buchanan and Dr. Cory, direct vaccinations of children from calf to arm have been carried out from that date onwards to the present time. From the calves vaccinated at Lamb's Conduit-street lymph has also been supplied to public vaccinators in quantity sufficient to enable them to start their periodical vaccinations, and provision has also been made for supplying a comparatively small amount of lymph to private practitioners in addition. The lymph thus sent out has for the most part been preserved by drying on ivory "points," although a certain proportion has been stored in the liquid form in capillary glass tubes. Until quite recently, however, all public vaccinations in this country, with the few exceptions just mentioned, were required to be performed by direct transmission of the virus from arm-to-arm, stational attendance at fixed periods having been arranged for in order to render feasible such method of operating, weekly attendance having been provided in large towns, while quarterly or even half-yearly periods suffice for the required purpose in scattered country districts. As the result, however, of the findings of the Royal Commission on Vaccination legislative measures are about to be introduced by which arm-to-arm vaccination will be entirely superseded, in public work at any rate, by animal vaccination; and the adoption of the use of preserved glycerinated calf lymph having been determined on, the necessity for stational attendance will disappear except in so far as may appear desirable for purposes of control or in order to provide facilities for teaching. The principal grounds on which the practice of animal vaccination has been advocated are, firstly, the opinion, widely though not universally held, that the results of vaccination from arm to arm are not such as they used to be in the earlier years of the practice of vaccination; in fact, that by repeated human transmission the virus has become weakened and that the pocks produced by the introduction of lymph which has passed through a large number of human beings are not so fine or so perfect as those which result from the use of animal lymph. Jenner himself, indeed, appears to have been under the apprehension that lymph-stocks would be liable to degenerate as the result of long-continued transmission through the human subject. In the present state of our knowledge, however, such enfeeblement of the specific virus can hardly be regarded as probable, except under such conditions as may be obviated by reasonable skill and care on the part of the operator. Jenner early discovered that vaccine lymph only exhibited its full degree of activity when taken at the stage of maturation of the vesicle and before its contents became at all purulent. If this precaution be observed, together with strict cleanliness in removal and insertion of the lymph, experience has shown that no appreciable degeneration can be demonstrated. Secondly, the opinion that certain other human diseases may be propagated together with vaccinia when vaccinations are performed from arm to arm. Galbiati, who was one of the first, if not the first, to vaccinate with bovine lymph, adduced this belief as his reason for practising vaccination from the cow, arguing that on vaccinating the cow from the human subject vaccinia alone would be communicated to her, any other morbid germs which might be introduced along with it remaining without effect. He considered apparently that in practising retro-vaccination according to the method which he devised he, as it were, filtered human vaccine material from any possible contamination. As the result of all the evidence brought before them during the lengthy period of seven years the English Royal Commission on Vaccination have reported that the risks incurred from arm-to-arm vaccination "are undoubtedly real and not inconsiderable in gross amount," although "when considered in relation to the extent of vaccination work done they are insignificant." And they add that "there is reason further to believe that they are diminishing under the better precautions of the present day and with the addition of the further precautions which experience suggests will do so still more in the future." It is, indeed, acknowledged on all hands that cases of syphilis can be and unfortunately have been occasionally conveyed from one human being to another as the direct result of vaccination; and although the number of cases which can be authenticated are extraordinarily small in number there is advantage in the adoption of a method which while equally efficacious entirely obviates the possibility of so lamentable an occurrence. Erysipelas and tuberculosis are also two of the not inconsiderable number of diseases with the spread of which vaccination has been credited. No doubt the greater proportion of cases of erysipelas following on the process are of what has been termed "late" origin. These are due to infection of the vaccination wound at or about the time when it has been customary to open the vesicle. The general use of animal vaccination by obviating the necessity for opening the vesicle may be expected to be followed by a diminution of cases originating in the manner suggested, though accidental injury to the arm or the use of improper dressings will doubtless prevent the complete disappearance of erysipelas or other septic diseases. Invaccinated erysipelas, however, we may anticipate will shortly become in great measure, at any rate, a thing of the past; and fortunately the possibility even of the invaccination of tubercle may be eliminated as the result of the treatment of calf vaccine with glycerine after a method which I first advocated some years ago and which has now been officially adopted by the Government.

GLYCERINATED LYMPH.

In a paper presented to the International Congress of Hygiene held in London in 1891, and subsequently published in the Transactions of that Congress, I called attention to a special method for the bacteriological purification and preservation of vaccine lymph. This method consisted in the intimate admixture of a given amount of lymph, or rather vesicle pulp, with a sterilised 50 per cent. solution of chemically pure glycerine in distilled water and in subsequent storage of the resultant emulsion in sealed capillary tubes for several weeks. For some years antecedent to 1891 I had been engaged in investigating the nature and mode of action of the specific virus contained in vaccine lymph, chiefly from the bacteriological point of view. Early in the course of my experiments it struck me that the exuberant growth commonly manifested by what were so evidently "extraneous" organisms might be very possibly interfering with, if not superseding, the more important and essential organism which I was seeking. I therefore turned my attention to the discovery, if possible, of some means of so treating vaccine lymph as to inhibit the multiplication in it of all "extraneous" organisms and eventually to destroy them altogether, without at the same time injuring its potency for vaccination. These bacteria evidently find in the lymph, especially when removed from the body, a suitable medium for their subsequent multiplication, while at the same time it would appear that growth and multiplication of them has the result of gradually inhibiting the specific effect proper to the vaccine virus itself. Upon all grounds, then, the obvious indication for my guidance was not only to prevent such multiplication of "extraneous" organisms subsequent to storage in the usual manner, but if possible to remove them altogether as soon as the lymph was taken from the living subject, without injury to the actual contagium of vaccinia. Without detailing the various experiments adopted with this object in view it is necessary here to state

briefly the lines on which the work was carried out. In the first place, trial was made of the method of exposure of lymph for definite periods to a temperature considerably above blood-heat, which had in the hands of Kitasato met with conspicuous success in the isolation of the bacillus of tetanus. Proceeding in this manner, and in every experiment observing the precaution of making control cultures, I presently arrived at a temperature, exposure to which is apparently incompatible with the continued existence of those micro-organisms which can ordinarily be grown when vaccine lymph is inoculated into nutrient jelly. The temperature in question ranged between 38° C. and 42° C., but the method did not in practice prove advantageous. Thus if plate cultures were made of lymph after exposure for an hour at the lower register a few points of growth occasionally after the lapse of a day or so made their appearance; and, on the other hand, the higher temperature, though it inhibited all extraneous microbes, appeared sometimes to exert an injurious effect on the lymph as far as regards the normal vesiculation which should result from its inoculation in the living animal. Some method of readier application and requiring less delicate manipulation was therefore obviously desirable. This I at length found in the addition to the lymph, or rather to the vesicular pulp, obtained from a vaccinated calf, of a sterilised 50 per cent. solution of chemically pure glycerine in distilled water prior to storage of the mixture in capillary tubes which had themselves been previously sterilised by heat.

Admixture of glycerine and vaccine lymph is, of course, no new device. Indeed, my attention has recently been directed to a letter by the late Mr. R. Cheyne which appeared in the *Medical Times* as long ago as March, 1850, in which he advocates the superiority of lymph which has been kept in the fluid state by addition of "the least portion" of glycerine over that which has been dried on points. As Mr. Cheyne's work appears to have been overlooked until quite recently, it may be of interest to set out in his own words his mode of procedure. "My method," he says, "is to take all the lymph I can get from the eighth-day vesicle on a glass stopper (elongated in a narrow tongue-shaped form for about an inch below the neck of the small bottle into which it fits) and, having accumulated it on both surfaces of the stopper near its end, I mix it well with the point of the probe, with the glycerine held by the latter. Then after the stopper is put into the bottle (which is always to be kept standing up) the lymph, then assisted by gravity, will collect itself into a distinct drop on each surface of the stopper, to be ready for use, as I know by experience, during a very long period and in any number of cases that would not exhaust the stock." In a further letter Mr. Cheyne acknowledges his indebtedness to the late Mr. Startin's advocacy of the therapeutic applications of glycerine, by which he learnt of the suitability of this substance for the object he had in view and sets out practically in the wording of Mr. Startin's paper the distinctive properties of this substance, among others, that of its being an antiseptic. He goes on to say: "I mixed glycerine with vaccine lymph in the way detailed ..... with the satisfactory result, better than any theory, of discovering that in addition to its known property of preventing fermentation and mouldiness in vegetable substances it had also that of keeping vaccine lymph, an animal product, undecomposed in a fluid state for months." Three years later (in 1853) Mr. Cheyne showed to the Presidents of the Royal Colleges of Physicians and Surgeons a child whom he had successfully vaccinated with lymph which he had previously kept for six months after treatment with glycerine.

It was left for Müller of Berlin in 1869 to demonstrate the further point that the quantity of matter available could be increased by the addition of glycerine without injuriously affecting the potency of the mixture. He showed that vaccine lymph might be diluted with three times its bulk of glycerine and still retain its properties unimpaired—a fact which has been taken advantage of at many of the continental vaccine stations and by more than one purveyor of lymph. Curschmann writing on the subject of small-pox in Ziemssen's Encyclopædia refers to this method as follows: "Müller has the great credit of having discovered the fact that by mixing vaccine matter with glycerine in certain proportions the activity of the former is not diminished, so that we have here a means of *increasing the volume of the lymph* when the quantity is small or when there is an unusual demand for it. .. ... The lymph and glycerine mixture *appears to keep as well as the unmixed lymph*."[2] But from this statement it is quite obvious that the sole object of employing glycerine in the manner described was to increase the amount of material available for vaccination. Also with this end in view glycerine was used by Dr. Stephen Mackenzie at the London Hospital in the epidemic of 1870–71, the mixture of lymph and glycerine being made up immediately before it was required for a large series of revaccinations. Similar means for increasing their amount of available lymph have been frequently employed by public vaccinators (among the earliest my present colleague, Dr. Bruce Low) and others in times of stress. In 1882 Dr. Warlomont patented in England a method of admixture of glycerine with vaccine lymph, but no mention of the use of glycerine in this connexion was made in the advertisements of his agents until within the last few months. Until recently, moreover, there would seem to have existed no appreciation of the inhibitory action exerted by glycerine in bringing about bacteriological purification of the lymph, when the mixture is stored for some time prior to use under conditions preventing access of air and light. When, however, a glycerine emulsion is properly prepared after the method I have advocated it is found that the growth of extraneous aerobic bacteria is at once greatly inhibited, while after a longer or shorter period they are practically all killed out. This effect is best demonstrated by making a series of plate cultivations from tubes of glycerinated lymph at gradually increasing intervals of time, a control plate being poured in each instance from a specimen of the lymph material prior to the admixture of the glycerine. These observations of mine, since their publication in 1891, have received ample corroboration from a number of observers in various parts of the world as follows:

In 1892 a paper dealing with this question was published by MM. Chambon and St. Yves Ménard in which they relate their experience of the use of glycerinated calf-lymph when kept for a considerable period in capillary glass tubes (previously sterilised) closed by the blow-pipe. Not only were the results they obtained with originally active lymph highly satisfactory, but lymph which in its fresh state had given mediocre results produced, after 15 days' admixture with glycerine, a passable vesicle, and after 40, 50, or 60 days a typical one. The improvement in the activity of such lymph seemed to them to be due to the gradual extinction of extraneous microbes under the combined influence of glycerine and time. Professor Straus, who made plate cultures with their glycerinated lymph, found that when fresh it gave rise to numerous colonies of various microbes, especially staphylococcus pyogenes aureus and staphylococcus albus, but that when it had been stored from 50 to 60 days, plate cultures therefrom remained absolutely sterile as regards these extraneous microbes. Samples tested at intervals between these two extremes presented fewer and fewer microbes as they became older. These experiments were repeated many times and invariably with similar results. This evidence, so entirely corroborative of my own work, is the more important as it appears certain from a perusal of their original paper that the authors were ignorant that similar results had been previously arrived at and that these had been published nearly twelve months before the appearance of their article.

The value of glycerine in this connexion is also strongly advocated by Leoni in a paper read before the Medical Congress held at Rome in April, 1894, and afterwards published in the *Révue d'Hygiène*. He finds that vaccine lymph as freshly collected is apt to contain large numbers of micro-organisms, some of which, he says, are capable of exerting pathogenic properties when inoculated into the system along with the true vaccine virus. And he states that these microbes disappear completely from, or that at least their number is vastly decreased in, vaccine which having been prepared with glycerine is afterwards preserved for a period of from one to four months before use. His conclusions may perhaps be best given in his own words: "Le vaccin récemment recueilli est un vaccin contaminé." "Les agents de la contamination s'épuisent dans le vaccin conservé pendant quelque temps dans la glycérine." "Le vaccin conservé dans la glycérine pendant 1 à 4 mois après la récolte, représente le type du vaccin *pur* d'une *virulence uniquement spécifique*." "C'est de cette qualité de vaccin que l'hygiéniste doit aujourd'hui tenir compte dans la prophylaxie de la variole." Dr. Klein also bears witness to the power

[2] The words italicised do not so appear in the original.

exerted by glycerine in freeing vaccine lymph from bacteria. In speaking of the organism specific to vaccinia as being probably a spore-bearing bacillus he says: "..... It is established that the active principle of vaccine is preserved in glycerine, although, as is also known, pure glycerine acting for long times is a germicide for cocci and sporeless bacilli."

In 1896 a Commission under the presidency of Dr. Schmidtmann—and including Dr. Koch, Dr. Pfeiffer, and Dr. Frosch, together with the directors of the vaccine institutes of Berlin, Cologne, and Stettin—was appointed by the German Government to inquire and report as to the best methods for the collection, preservation, storage, distribution, and use of vaccine lymph In their report, which has been recently published, the Commissioners arrive at the conclusion among others that fresh lymph contains numerous microbes, the number of which, on the addition of glycerine, diminishes as the age of the mixture increases. To determine to what extent glycerine is efficacious in destroying the vitality of various definitely pathogenic microbes numerous streptococci and diphtheria bacilli were mixed with specimens of lymph. As a result the streptococci were killed in eleven days and the diphtheria bacilli in twenty days. Attempts by these experimenters, as also by Kitasato in Japan, to make other chemical agents serve for rendering vaccine lymph free from bacteria led to no results of value, as although the lymph could thus be rendered free from extraneous bacteria it was found to be inefficacious as vaccine. Their next procedure was to determine the amount of glycerine that could be added to lymph so as to exert a powerful action in purifying it from extraneous microbes without in any way interfering with its specific action when employed for the vaccination of children or calves, and they came to the conclusion that the mixture of glycerine with distilled water could be employed to the extent of from 15 to 20 times the weight of vesicle pulp collected without interfering with the value of the material for the purpose of vaccination.

By consent, therefore, of numerous observers fully qualified to judge of the matter we have in glycerinated calf lymph properly prepared a vaccine material which, while even more efficient as vaccine than the original lymph, can be produced practically free from the extraneous organisms which at one time or another have been isolated from fresh or stored lymph by the method of plate-cultivation. Of not least importance is the fact that, as shown by Dr. Blaxall and myself, vaccine lymph may by this method of preparation with glycerine be rendered free also from pathogenic bacteria, such as those of tubercle and erysipelas, even when these have previously been added in considerable quantity for experimental purposes. The fact that the growth of the tubercle bacillus is well known to be encouraged in a nutritive medium containing about 5 per cent. of glycerine in no way detracts from the value of this substance when used in a strength of from 40 per cent. to 50 per cent. as a means of obtaining lymph free from pathogenic organisms. That particular drugs when introduced in small quantities into the human economy seemingly stimulate and encourage certain of its functions, whereas when introduced in large quantity they discourage or even annul them, is a fact familiar to every practitioner, and it is also well known to bacteriologists that micro-organisms are profoundly affected by variations in one or another direction of the amount of one and the same chemical constituent of the particular medium in which they are placed. The question of quality of vaccine lymph naturally engaged the attention of the English Royal Commission on Vaccination at a time when they were taking the evidence of witnesses and among the recommendations contained in their final report is one to the effect that no persons should be required to submit to vaccination by means of any other lymph than that derived from the calf. The reason for this recommendation appears to be avoidance of even remote risk of inoculation, in the process of vaccination, of infections other than cow-pox—such, for instance, as those of syphilis and leprosy (Section 433)—as also the desirability of minimising the opportunity for infection by erysipelas by obviating the necessity for opening vaccine vesicles involved in arm-to-arm vaccination (Section 447). The succeeding section of the report which deals specially with the subject now being discussed may be set out in full. It is as follows:—

"448. We think that safety would be increased by preserving the lymph in tubes instead of on 'dry points.' There is some difference of opinion on this matter among those with whose opinions we have been furnished. On the whole, however, we think the weight of experience as well as reason is in the direction we have indicated. In connexion with this subject our attention has been drawn to the experiments recently made by Dr. Copeman as to the effect of the storage of vaccine-lymph in glycerine. The conclusions at which he arrives are that the addition of glycerine, whilst it leaves the efficacy of the lymph undiminished, or even increases it, tends to destroy other organisms. If it be the fact that the efficacy of the lymph remains unimpaired its storage in glycerine would largely diminish the difficulties connected with the use of calf lymph which are inseparable from calf to arm vaccination. The investigation has not reached a point at which it is possible to pronounce with certainty whether the anticipated results would be obtained. And it was at one time suggested that the introduction of glycerine was likely to be mischievous. The question is one a further investigation of which is obviously desirable If lymph is to be preserved in glycerine due care would be requisite to ensure its purity and the absence of contamination in its introduction. We think that, whether mixed with glycerine or not, each tube should contain only sufficient lymph for the vaccination of one person.

In this Section (448) of the Royal Commissioners' report a sentence occurs to which some special reference is desirable. This is as follows: "And it was at one time suggested that the introduction of glycerine was likely to be mischievous." The reference made is to an outbreak of disease having the clinical characters of impetigo, which occurred in the summer of 1885 in villages situated on the island of Rügen in the Baltic, after the vaccination of 79 children in the latter part of June of that year. This outbreak forms the subject of a paper by the late Sir George Buchanan in the Transactions of the Epidemiological Society for 1885–86. He states that for the vaccination of these 79 children only two tubes of lymph (of human origin) were available and consequently their contents were further mixed with glycerine (glycerinum purissimum) before use. Thymol to the extent of one-third had also been mixed with the lymph previously to its having been sent out from the Government establishment at Stettin. Sir George Buchanan states that the principal misgivings of the Commission appointed to inquire into the outbreak had concern with the glycerine, but adds that several points in the circumstantial evidence, however, suggest that the Stettin mixture *before glycerine had been added* may have been responsible for some irritation. He further says, however: "I do not know of any experience in England of inoculation with thymol or thymol and glycerine, but I have heard of dilutions of lymph with glycerine always from people complaining of the lymph." In giving evidence before the Royal Commission on Vaccination in 1893 I was asked whether this statement did not condemn my suggested use of glycerine in connexion with lymph supplies. I pointed out, however, that in the first place dilution of lymph with an indefinite quantity of "glycerine" of unknown composition just before employing the mixture for vaccination, was a very different matter from storing lymph with chemically pure glycerine in definite amount and of definite strength, the whole being protected from light and air for a length of time before use and that in addition what at the time of the outbreak in question may have been termed glycerinum purissimum would in all probability at the present day be considered by no means deserving of that term. This latter statement I made on the authority of Messrs. Price, the chief manufacturers of glycerine in this country, whose manager at the request of the directors was good enough to put at my disposal his extensive practical knowledge of the details and the literature of this subject. The information thus obtained has been published in the appendix to the last volume of evidence recently issued by the Royal Commission on Vaccination. The glycerine which has been employed in my investigations is that manufactured in this country by Messrs. Price, but in Germany, where this method of purification and preservation is now carried out in all the Government establishments for the supply of vaccine lymph, a glycerine made by Sarg of Vienna is used. This is said by Dr. Schultz, the director of the Berlin establishment, to be of a less "drying" nature than English glycerine. In order to obtain an authoritative opinion as to the degree of chemical purity obtained in the manufacture of glycerine at the present time and also an accurate estimate of the difference, if any, in the nature of the English and Austrian brands, I requested Dr. Wilson Hake to analyse samples of glycerine manufactured by Messrs. Price and by Sarg respectively, and also samples of a new English brand which had just been placed on the market by Messrs. Lever Bros. The result of the chemical examination of these samples, which Dr. Hake was kind enough to make for me, proves incontestibly that all three samples exhibit a high degree of purity, most

markedly so in the case of Messrs. Price's manufacture. In all there is complete absence of metallic contamination of any kind, while the amount of organic impurity is insignificant. The main difference observed is the slightly greater degree of concentration obtained in the English products as opposed to that of Austrian manufacture.

In accordance with the suggestion contained in Section 448 of the Report of the Royal Commission the Local Government Board instructed me to make arrangements with Dr. Blaxall, the lecturer on Bacteriology at Westminster Hospital, and now Bacteriologist to the Government vaccine laboratories, to carry out a further series of experiments on the lines indicated by me in the evidence which had been tendered to the Commission, with the object of elucidating more fully the exact value of my glycerine method for the purification and preservation of vaccine lymph. The results of this series of experiments are set out in the report of the medical officer to the Local Government Board for the year 1895–96, published in the autumn of 1897. Although devoting our attention mainly to the results which ensued on the employment of glycerine, it was thought desirable that investigation should be made concurrently as to the possible value for the preservation and purification of vaccine material, of lanoline and vaseline, substances which within quite recent years have been introduced by two officers of the Indian Medical Service, Surgeon-Lieutenant-Colonel King and Surgeon-Major Bamber respectively, as being superior in their opinion to glycerine as agencies for the preservation of vaccine.[3] Neither of these observers, however, has as yet brought forward any bacteriological evidence as to a possible germicidal action of the substance they advocate, as will be seen on reference to their original papers. And Dr. Blaxall has shown that from this point of view at any rate neither lanoline nor vaseline can be regarded as possessing any value whatever. Indeed, it would appear that the extraneous organisms originally present in the lymph with which these substances are admixed, so far from exhibiting as time goes on any diminution in numbers, tend on the contrary to become largely increased as shown by the test of plate-cultivation. Lanoline and vaseline are thought by their advocates to possess superiority over glycerine mainly for the following reason. These officers note that glycerine emulsion tends to become mouldy after a short period, whereas this they do not find to be the case when either lanoline or vaseline is employed. That glycerinated lymph should have suffered deterioration in the way they indicate suggests either that it was not properly prepared or that it was left exposed to the air. That the occurrence of a similar accident is not an impossibility with lanoline and vaseline preparations has been demonstrated by Dr. Blaxall's recent experience of their use.

The advantages of glycerinated calf lymph may be set out as follows: 1. By employing the method of glycerination of lymph-pulp great increase in quantity can be obtained without any consequent deterioration in quality, the percentage insertion success following on its use being equal to that obtained with perfectly active fresh lymph. 2. Glycerinated lymph does not dry up rapidly as does unglycerinated lymph, thus simplifying the process of vaccination. 3. Glycerinated lymph does not coagulate, so that it never becomes necessary to discard a tube on this account. 4. Glycerinated lymph can be produced absolutely free from the various streptococci and staphylococci which are usually to be found in untreated calf lymph and which are considered by Crookshank and others as liable to occasion suppuration. 5. In like manner the streptococcus of erysipelas, in the event of its having been originally present in the lymph material, is rapidly killed out by the germicidal action of the glycerine. 6. The tubercle bacillus is effectually destroyed even when large quantities of virulent cultures have been purposely added to the lymph. 7. The possibility of inoculation of syphilis is eliminated, as the calf is not subject to this disease. 8. The necessity for collecting children together, with the attendant risk of spread of infectious diseases, or of transporting a calf from place to place, is obviated, while the danger of "late" erysipelas in the child is minimised by reason of there being no necessity to open the mature vesicles for the purpose of obtaining lymph. 9. The bacteriological purity and clinical activity of large quantities of the lymph can be readily tested prior to distribution. 10. By reason of the possibility of keeping large stocks of glycerinated lymph on hand for considerable periods of time without appreciable deterioration, any sudden demand such as is likely to arise on outbreak of epidemic small-pox can be promptly met. 11. The expense of producing glycerinated lymph is proportionally small, since the amount obtainable from each calf is enormously increased.

[3] The use of vaseline as an excipient for vaccine material had apparently been advocated by Professor Layet of Lyons some years previously to Surgeon-Major Bamber's first communication on the subject.

THE PREPARATION OF GLYCERINATED CALF LYMPH.

The method best adapted for the production of glycerinated calf lymph which shall be free from all extraneous organisms, of perfect efficacy, and yet affording material for the vaccination of many more children than the original unglycerinated calf lymph, is briefly as follows.

The preparation of the calf.—A calf of suitable age, about from three to six months old, should be kept in quarantine for a week, after which, if found to be quite healthy, it may be removed to the vaccination station. It is there placed on a tilting table and the lower part of the abdomen, reaching as far forward as the umbilicus, having been shaved is thoroughly washed with a solution of carbolic acid and then rinsed with sterile water and dried with soft sterilised towels.

Inoculation of the calf.—With a sterilised sharp scalpel, incisions parallel to the long axis of the body are made on this clean-shaved area. The depth of the incision should be such as to pass through the epidermis and to open the rete Malpighii, if possible without drawing blood. As these incisions are made, glycerinated calf lymph, which by examination has been proved to be free from extraneous organisms, is run into them by means of a sterilised blunt instrument and the point of the scalpel is also from time to time dipped into the vaccine emulsion.

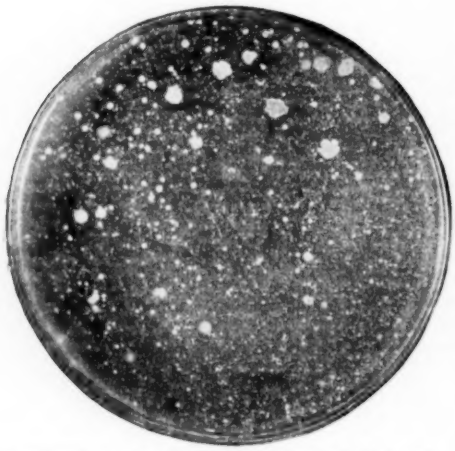
Collection from the calf.—After 5 days, or 120 hours, the vaccinated surface of the calf is first thoroughly washed with warm water and soap, rubbed over it by the clean hand of the operator, and finally the whole area is carefully cleansed with sterile water. The remaining moisture is then removed by sterilised sheets of blotting-paper. The vaccinated incisions will now appear as lines of continuous vesicles raised above the surface, each line separated from its neighbour by about ¼ in. of clear skin. Any crusts which appear in the vesicular lines are picked off with a blunt sterilised instrument. The vesicles and their contents are then removed by means of a sterilised Volkmann's spoon and transferred to a sterilised bottle of known weight. By going over the lines only once with the spoon it is quite easy to remove the whole of the pulp without any admixture of blood. The abraded surface is carefully washed and may be dusted over with fine oatmeal or starch and boracic powder. Subsequently the calf is transferred to the slaughter-house and the carcass is examined by the veterinary surgeon, who forwards a certificate of its condition. Should this not be satisfactory the vaccine pulp obtained from the animal is destroyed.

Preparation and glycerination of the lymph-pulp.—The bottle containing the vaccine pulp is taken to the laboratory and the exact weight of the material ascertained. A calf vaccinated in this way will yield from 18 to 24 grammes, or even more, of lymph-pulp. This material is then thoroughly rubbed up in a sterilised mortar or in a mechanical triturating machine. When it has been brought to a fine state of division it is mixed with six times its weight of a sterilised solution of 50 per cent. chemically pure glycerine in distilled water. The resulting emulsion is then transferred to small test tubes, which are then aseptically sealed and should be stored in a cool place protected from light. When required for distribution it is drawn up into sterilised capillary tubes which are subsequently sealed in the flame of a spirit lamp.

Bacteriological examination of the lymph emulsion.—As soon as the vesicular pulp is thoroughly emulsified with the glycerine solution agar-agar plates are established from it and after suitable incubation for seven days the colonies that have developed on the plates are counted and examined (see Figs. 1 to 5). Week by week this process is repeated and invariably the number of colonies diminishes with the age of the emulsion, until at the end of the fourth week (see Fig. 6) after the collection and glycerination of the lymph material the agar-agar plates inoculated at that time show no development of colonies. The lymph is then subjected to further culture experiments and if these results of freedom from extraneous organisms are confirmed the emulsion is ready for distribution. The elimination of the extraneous organisms in our experiments has occurred with

marked regularity at the end of the fourth week. The only exception to this rule arises when the lymph originally contained a considerable number of spores or bacilli of the hay bacillus or bacillus mesentericus. These organisms are very resistent to the action of glycerine, but if the precautions detailed are carried out in the treatment of the calf their presence may generally be excluded.

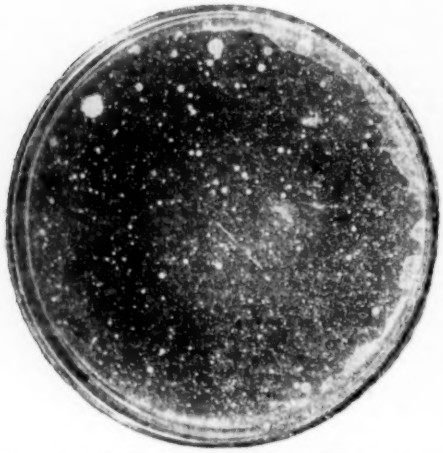
FIG. 1.



Photograph of agar plate incubated for seven days subsequently to inoculation with *one loopful* of rubbed-up vaccine material *prior* to its admixture with glycerine.

Duration of activity of glycerinated calf lymph.—This varies in all probability with atmospheric conditions, with the fineness of division of the vesicle pulp, and, above all, with the condition of the calf itself. Some calves yield an excellent lymph, others a poor lymph, and the problem is to determine the value of the lymph yielded

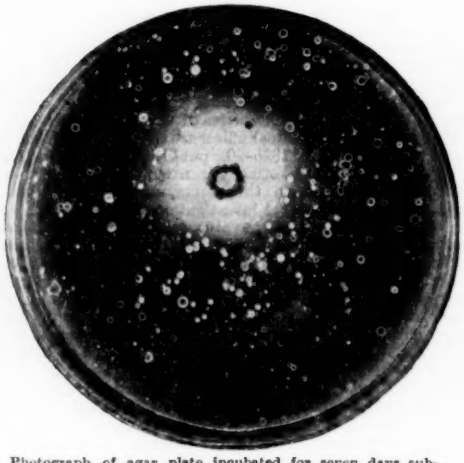
FIG. 2.



Photograph of agar plate incubated for seven days subsequently to inoculation with *five loopfuls* of the same material *immediately after* glycerination. The number of colonies on these two plates (Figs. 1 and 2) will be observed to correspond closely.

by any given calf. A lymph which was collected and glycerinated on July 13th, 1897, has since been used at intervals of from 24 weeks to 32 weeks after glycerination for the vaccination of children. During this period 61 children have been vaccinated with this lymph in 5 places each, with a mean insertion success of 98 per cent.[4] Thus by the methods described glycerinated calf lymph can be prepared which becomes freed from extraneous organisms, is available for a large number of vaccinations, at least 2000 from an average calf, and retains full activity for ten months and will, under favourable circumstances, continue to do so in all probability for still longer periods if

FIG. 3



Photograph of agar plate incubated for seven days subsequently to inoculation with *five loopfuls* of the stock glycerinated emulsion *one week after* preparation. The number of colonies is somewhat diminished.

necessary. In practice, however, there will, of course, be no reason for keeping lymph for such a period.

From the description which I have given it will, I think, be obvious that the preparation and testing of glycerinated calf lymph, properly so-called, is a matter requiring considerable skill and care. Sir Richard Thorne insists strongly

FIG. 4.

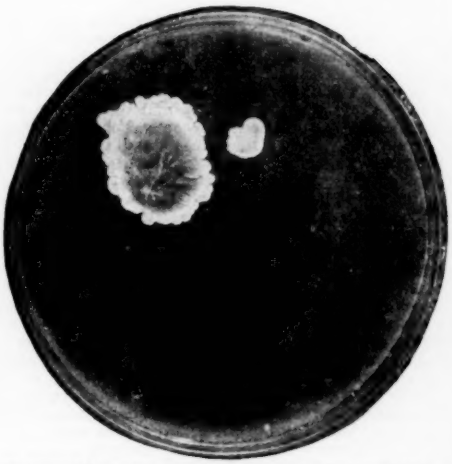
Photograph of similar agar plate inoculated *a fortnight after* glycerination. A further decrease in the number of colonies is now conspicuous.

on this fact in his introduction to our joint report recently presented to Government on the administration of certain of the chief continental vaccine establishments. "In every

[4] This same sample of lymph (now forty-two weeks old) has given in Dr. Cory's hands during the past week an insertion success (based on 50 insertions) of 100 per cent.

instance," he says, "we found that the work of collecting preparing, and storing the glycerinated lymph was carried out with the greatest care; a condition of scientific cleanliness was especially aimed at, and a laboratory, fitted with bacteriological and other scientific apparatus, always formed an essential part of the vaccine institution. The extent to which the desired end of freedom from extraneous impurity was

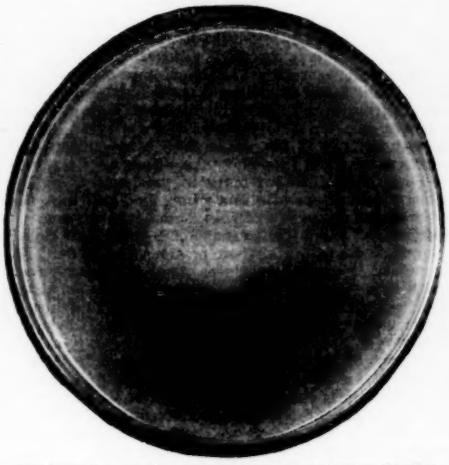
FIG. 5.



Photograph of similar agar plate inoculated *three weeks after* glycerination. The decrease in the number of colonies is still more marked than in the former plates.

attained depended largely on whether a first attempt to adapt an existing calf station or similar establishment to its new purposes had been maintained, or whether it had been abandoned in favour of an institution constructed especially for the purposes of that which is in the main scientific laboratory work. Several of the stations which we visited are already under condemnation because of the difficulty

FIG. 6.



Photograph of similar agar plate inoculated *four weeks after* glycerination. No growth whatever has occurred.

of ensuring that freedom from micro-organisms which should be aimed at during the preparation of the lymph-supply; the Cologne station is one of the newest and may well serve in its main features as a type of that which should be aimed at. The condition of scientific cleanliness to which I have referred extended to such matters as the following: (*a*) the construction and administration of the stabling for the calves; (*b*) the means of washing or bathing calves before their vaccination; (*c*) the construction, cleansing, &c., of the operating rooms; (*d*) the cleansing of the vaccinated surface of the calf with germicidal preparations and sterilised cloths before collection of the lymph; (*e*) the use of clean sterilised outer garments by all officials concerned in the processes carried out; (*f*) the sterilisation of all instruments, &c., employed; and (*g*) the admixture of the lymph material or pulp with glycerine, its preparation and storage under conditions of laboratory freedom from extraneous organisms.

"With a view of meeting all possible criticism as to the chance of conveying tuberculosis together with calf lymph we found that, notwithstanding the well-known rarity of that disease in calves, together with the now recognised germicidal effect on the tubercle bacillus when deliberately added to calf lymph prepared with an aqueous solution of glycerine as described, it was the practice not to issue any lymph until a report had been received from a veterinary surgeon—after slaughter of the animal—of the freedom of the calf in question from tuberculosis or other disease. In brief, the lymph used is that of healthy calves only.

FIG. 7.

Photograph of child (eighth day) vaccinated with glycerinated calf lymph, which, as shown in Fig. 6, had been found, when tested by the method of plate cultivation, to be free from extraneous micro-organisms.

"The information which we obtained in the course of our visits does not profess to be complete. Much remains to be ascertained by careful scientific research in order to learn what are the precise conditions under which glycerinated calf lymph can be prepared and stored, so as to secure, to the utmost, freedom from extraneous and, especially, from pathogenic micro-organisms, whilst at the same time retaining to the utmost the undiminished protective value of the lymph material against small-pox. In every country visited further research is being made in this direction and in Germany a special commission of medical and bacteriological experts has been appointed by the Government in order to study and report upon the subject. But the information which is now available in this country and that which during the course of our visits abroad was placed at our disposal with a readiness and a courtesy which calls for an expression of the fullest acknowledgment suffices to enable me to submit the following conclusions:—

"1. It is desirable that vaccination, both primary and secondary, carried out under the auspices of the Government, should be performed exclusively with vaccine lymph derived from the calf.

"2. There will probably be advantage in retaining, for a time at least, the system of calf-to-arm vaccination at the Board's Animal Vaccine Station for such parents and others as may request it and for the purposes of comparing its results with those following the use of calf lymph preserved in one or another way.

"3. The distribution of calf vaccine from the National Vaccine Establishment should be limited to glycerinated or similar preparations of lymph or pulp material in air-tight tubes or other glass receptacle.

"4. To give effect to the above it will be requisite that the Board's Animal Vaccine Station should be reorganised both as regards construction and administration. Notably will it be requisite that it should include a properly equipped laboratory under the direct supervision of a bacteriological expert."

These recommendations are now in process of adoption by the Government and already suitable laboratories have been secured which are to be placed in the charge of Dr. Blaxall. I trust, therefore, that we shall shortly be in a position to supply bacteriologically pure and fully active calf vaccine lymph in any quantity that may be found desirable.

An Oration

ON

THE MOSCOW CONGRESS—A HOLIDAY; WITH COMMENTS ON SUGGESTED TOPICS.

Delivered before the Medical Society of London on May 16th, 1898,

BY FREDERICK T. ROBERTS, M.D., F.R.C.P. LOND.,

PROFESSOR OF MEDICINE AT UNIVERSITY COLLEGE; PHYSICIAN TO, AND PROFESSOR OF CLINICAL MEDICINE AT, UNIVERSITY COLLEGE HOSPITAL.

MR. PRESIDENT AND GENTLEMEN,—You, Sir, with the other members of the Council of the Medical Society of London have again, from purely friendly motives, lured me from the obscurity and retirement for which I instinctively crave and for which nature intended me and have thrust me into a conspicuous and much-coveted position. I should indeed be wanting in appreciation of such kindness, and even in mere courtesy, if I did not express at the outset my feeling of deep gratitude for the honour thus conferred upon me, especially as it is wholly undeserved. I am, however, none the less conscious of my unfitness for the task and of my deficiency in the qualifications necessary to command the attention and interest of such an audience as is gathered together on an occasion like this, most of whom are, I have no doubt, impatient and eager to take part in the more attractive social functions of a conversazione, to enjoy a chat with friends whom probably they seldom meet except at these times, and to indulge in the delights of the "fragrant weed." And yet, Sir, you have now actually designated me an "orator!" Fortunately for my peace of mind this word has nowadays a very wide and indefinite signification and by no means implies the possession of the faculties or powers which were originally associated with the expression and which in ordinary language it is supposed to suggest.

With the view of getting a hint as to a suitable topic for this address I asked our always obliging and courteous registrar—Mr. Hall—whether he could furnish me with a list of the subjects dealt with in previous orations. There was no such record, but he at once took the trouble to prepare one and as the result I have here a list of the orators since 1774 and of the topics on which they discoursed, so far as they are known at present. I have thus at least the satisfaction of being responsible indirectly for calling into existence a record which, while of great interest in itself, will be of much value for future reference. I found, however, that it did not help me materially, except by showing that the subjects presented great variety and that I was at liberty to be guided entirely by my own inclination in selecting one. Of course favourite themes were, in addition to matters relating to the Society itself, the grandeur of our profession as well as its defects, its internal and external relations, how to promote its progress, and the remarkable advances, real or supposed, made from time to time in the various branches of medicine and surgery. There are always tempting and attractive topics, which open up channels for any amount of talk, but for various reasons I personally rather shrink from them, and at any rate they are sufficiently discussed at the present day not to call for any special reference to either of them on this occasion.

I need scarcely remind you that the year 1897 was a memorable one in several respects and some of its events have had important relations to the medical profession. Amongst those of special interest to us were the annual meeting of the British Medical Association, held for the first time in one of our great colonies, and the Twelfth International Medical Congress at Moscow. For reasons which I need not enter upon I chose to attend the latter; and "The Moscow Congress" seemed such an easy way of getting out of any difficulty in deciding upon a subject that I determined to inflict it upon you, though I have no doubt most of you, either from personal experience or from reading the accounts in the medical and lay press, know as much about it as you desire. I must therefore appeal to your kind indulgence on this ground amongst others, that in days to come the mere record in the Transactions of the Medical Society of London of the fact that the International Medical Congress was held in Moscow in 1897 may prove interesting to future generations, and especially that this society was represented as a delegate by its esteemed and distinguished president, Dr. Sansom. I regret to say that I am not the first in the field, for others in this and other countries have given addresses on their Russian experiences and impressions in connexion with the Congress, which does not make my task any the easier or lighter. I hope, however, that there is still something left for me to speak about, and there are aspects of the subject which, so far as I am aware, have not yet been dealt with.

It must seem at first sight highly incongruous and absurd to associate, as I have done, the idea of "a holiday" with the Moscow Congress. To think of going from one large city to another in the height of the hot season, attending crowded meetings as well as fatiguing evening social gatherings and entertainments, most of them continued into the "early hours," and calling such an experience a holiday! Moreover, judging from remarks I have heard, it seems to be a deep-rooted notion amongst the laity, as well as amongst many medical men who do not honour congresses with their presence, that those who do attend such gatherings are consumed with an ardent desire for scientific and professional progress and consequently devote themselves heart and soul to the active work connected therewith, taking part in various discussions, reading and listening to elaborate papers, absorbing and imparting fresh knowledge, and helping to bring into practical utility the results of all sorts of novel and marvellous discoveries. I think, Mr. President, you will agree with me that on the whole this is a delusion, though there are no doubt a few who take things very seriously on these occasions. I may remark in passing that individual notions as to what constitutes a "holiday" and how it may be best spent are very different. A few years ago a very interesting and delightful account of a "Doctor's Holiday" formed the topic of one of these orations by Dr. Ord. There was an air of calm and restfulness about his experiences that made them highly attractive. Others must be always killing something, but in saying this I do not mean to cast any reflection upon members of our profession. Others, again, make a very toilsome business of a holiday, being incessantly "on the move," taking "record" walks or bicycle rides, or climbing some mountain peak, and the more dangerous their exploits the keener the pleasure they derive therefrom. Some stay at home perpetually, being so devoted to the practice of their profession that this is to them a constant holiday and they are miserable when away from their work.

Speaking personally I am glad to say that I can thoroughly enjoy different kinds of holidays, provided I am not expected to put forth too much energy and needlessly risk my life and limbs. From more than one point of view the visit to Moscow might fairly come under the category, for at any rate it afforded a rest and change from the ordinary routine of London life, professional and social; while, altogether apart from the Congress itself, one could not but feel deeply interested in the novel sights and experiences associated with a most remarkable country and city not previously

visited and in observing and gaining some acquaintance with the Russian people, their conditions, habits, and mode of life. But in the title of my address I have coupled the idea of a holiday with the Moscow Congress for a special reason. I wish it to be clearly understood that in relation to this event I held an entirely unofficial, independent, and individual position. I was not even a "delegate" from any society, association, corporate body, or university, but a mere "outsider," an "item," an "unit" in that vast gathering, occupying a very "back seat" and decorated with the simplest badge which the Congress could furnish. Do not imagine for a moment that I am complaining of this. I rejoiced in my liberty and took full advantage of it. I felt that I could spend my time exactly as I liked, so long as I conducted myself in accordance with Russian regulations and ideas, disregard of which might lead to unpleasant consequences. Further, I was calm in the happy consciousness that unless I chose to do so I was not called upon to take any active part in the work of the Congress, nor had I looming before me the prospect of having to give an account of my doings or to prepare any official report. And now, Mr. President and Gentlemen, I am ashamed to confess that I did nothing of which there will be any record in the proceedings of the Moscow Congress. The Transactions of this society will bear testimony to the general fact that I never read papers anywhere if I can possibly avoid doing so, and I must say that I do not regard it as the height of bliss to be obliged to listen to them, especially when they are practically inaudible and delivered in, to me, an unintelligible language. As to taking part in a discussion I shudder at the mere thought. I am fully aware that in these days such conduct is very foolish from several important points of view and I by no means commend it for imitation. On the contrary, I take this opportunity of strongly advising the "rising generations" of the medical profession to bring themselves to the front as much as possible if they wish to succeed, and to assert themselves, not only at home but abroad, and especially when they attend foreign congresses. I cannot answer for members of other professions, for men engaged in commerce, for explorers of new countries and so-called "pioneers of civilisation," for politicians or statesmen; but as regards the members of the medical faculty in this country I have a strong impression that as a class we are not so forward or "pushful" as we might be and in this respect are far behind certain other nations. Consequently their representatives are always to the fore at these gatherings and only too ready and eager to assume prominent positions. At the Moscow Congress a few of our representatives were invited to occupy more or less conspicuous positions, or to read communications on special subjects. We were all particularly pleased to see Sir William Mac Cormac presiding at the last of the general meetings and he conducted the proceedings in his customary dignified and genial manner. Dr. Lauder Brunton upheld the honour and prestige of his country by delivering one of the addresses at the first great meeting. Our distinguished Fellow, Dr. Pavy, read a communication on Diabetes by special invitation. Others were elected vice-presidents or presidents of Sections and occupied the chair at some of these gatherings, amongst them the President of this society. A few of their own free will sacrificed their comfort to their sense of duty by reading papers or joining in discussions. On the whole, however, our countrymen kept very much in the background and the record of actual work done at the Moscow Congress will not contain so many names of our well-known leading men as might be wished. And now, Mr. President and Gentlemen, I have further to confess, as bearing out my idea of a holiday, that I did not even attend the meetings of the Sections as diligently or regularly as I might or ought to have done. In duty bound I entered my name for one of them—namely, that of the "Malades Internes"—and did spend a little time there at intervals. Moreover, I looked in at other sections in a casual way, more from curiosity than anything else, and was sometimes much entertained, if not edified or instructed.

My remarks up to this point will have prepared you for the announcement that I am not in a position to give such an account of the scientific and practical outcome of the proceedings of the Moscow Congress as you might reasonably expect. For this perhaps you will be grateful, for a disquisition on this line is apt to be very tedious and trying for an audience. But while I did not actively engage in the work of the Congress I desire at once to remove any impression that I looked upon the occasion as a mere pastime or that I intend to deal with my subject in a wholly frivolous and irresponsible fashion. In relation to the gathering itself one could not help feeling a real interest in the proceedings, observing and taking note of events and circumstances connected therewith, reflecting upon the work done and the subjects dealt with, and endeavouring to realise and estimate the present position of our profession, as well as the comprehensive or cosmopolitan tendencies of modern thought and practice in relation to the "science and art of medicine," using the expression in its widest sense. Moreover, a medical congress suggests, either directly or indirectly, many questions of the deepest interest and importance to us as a profession and I regard my independent and unofficial position at Moscow as affording me full liberty to refer to any matters of current interest which fairly come within the range of my theme and to express my personal opinions and feelings in relation thereto.

Before dealing briefly with some of the more prominent events immediately relating to the Moscow Congress I must just allude to a difficulty which pertains more or less to all international congresses, but which in this case assumed unusual proportions, and that is as regards the matter of languages. Personally, I must regretfully admit that I am very deficient in knowledge of foreign tongues and much of my remissness in listening to papers and discussions was, as I have already hinted, due to this cause. I have an impression that not a few of my fellow countrymen were not much better off than myself, though some, on the other hand, excited our envy by being able to discourse fluently in public in French or German. But I was particularly struck, not only with the advantage of a thorough knowledge of these and other of the more familiar modern languages, but also with the importance of cultivating the faculty of acquiring languages. I desire to enforce this point emphatically upon my younger hearers. At the present day you have very great advantages over your predecessors and are expected to have a tolerable acquaintance, at any rate, with French and German, especially if you aim at taking a high position in your profession. This is necessary even for literary purposes, but I would remind you that to carry on a conversation in these languages and to follow with comfort the business of a foreign congress are very different matters from merely knowing just enough to enable you to read books and articles on professional subjects. I met some American friends at Moscow, who, being adepts at learning languages, from prolonged training, and possessing much determination, arrived there with a very fair knowledge of Russian, which served them, and their companions sometimes, myself amongst the number, in excellent stead. One gentleman from the United States actually responded in Russian to a "toast" at the dinner of one of the Sections, and you may imagine with what enthusiasm his speech was received.

It is a common impression, and probably a true one, that foreigners learn English much more frequently and thoroughly than we do their languages, and we are often given to understand that Russians are especially proficient in our tongue. So far as my experience went this is certainly a delusion, for I met with very few Russians who knew anything about English, though a comparatively small number had a smattering which enabled them to be of decided help, for which one felt very grateful. In this connexion I may mention that I have seen it stated in print, though I cannot personally vouch for the fact, that in the Sections "an English paper usually cleared the room, or nearly so, of all but English and Americans." Although it has been affirmed that we as a nation were not in particularly high favour at the Moscow Congress I cannot suppose that such conduct was intentional, but would rather take the more friendly view that it was the natural outcome of linguistic difficulties.

It was a very gracious act on the part of the Government to give members of the Congress "free passes" over their railways, nor would it be right to omit acknowledging the efforts which they made to guide and help benighted travellers on their arrival at the Russian frontier and at the railway stations of the great cities, as well as in their travels from place to place. That they were not always successful was due to circumstances over which they had no control. Russians of all classes are undoubtedly most civil, courteous, and obliging, and personally I was treated with the greatest civility and consideration at the frontier. With a good deal of lifting of hats and bowing the officials declined to examine any of my luggage. Unfortunately, however, this

experience taught me rather an unpleasant lesson, of which I give you the benefit, and that is not to trust too much in people who treat you with excessive politeness and suavity. As a matter of fact, my luggage was not sent on at all, but retained at the frontier owing to some little hitch in the matter of stamping, and I spent the greater part of my time at St. Petersburg, which I first visited on my way to Moscow in endeavouring to gain possession of it—a feat which I believe I never should have accomplished had it not been for the help of some most kind English friends. And here let me express my personal obligations, shared, I am sure, by many of my fellow countrymen, for the kindness and courtesy shown us by British subjects resident in Russia, both in St. Petersburg and Moscow, including his Excellency the British Ambassador, the Consuls and Vice-Consuls, representatives of the press, and private individuals.

On arriving at Moscow it was an immense relief, in the midst of the din and confusion, to be addressed in broken English, but sufficient for the purpose, by a most active, intelligent, and agreeable medical student, in neat uniform, who took charge of our party, speedily relieved us of all trouble and anxiety, and conducted us most comfortably to our destination. Indeed, throughout the Congress we found the students, ladies amongst them, most kind, attentive, and helpful, and I shall ever remember them with pleasure and gratitude.

I think that those who were present at the Moscow Congress are not likely to forget the "Manège" or "Palais d'Exercice," a huge building in which the "central bureau," with its various departments, was located. For those who had arrived fairly early and had got over their troubles without any great difficulty it was decidedly amusing to watch the frantic struggles of the seething crowd of applicants for tickets, badges, programmes, and general information. It so happened that at the time of the Congress a correspondence was going on in one of the London daily papers with regard to "overcrowding in the medical profession" and while there I came across some of the letters on the subject. It struck me, here was an object lesson of the fact with a vengeance! Between 7000 and 8000 members of the craft were gathered together and we were a motley crowd! There appeared to be representatives of almost every known more or less civilised nation or country and of every type of humanity. Need I say that we were also honoured by the presence of a considerable proportion of "lady doctors," who are quite an institution in Russia? If one ever felt dull or tired a visit to the "Manège" was always entertaining and interesting, but the time to see it at its best was during the period of the day allotted to "free lunch and drinks," with which we were most generously regaled for several days.

A striking contrast to the "Manège" was the "Assemblée des Médecins," where the "Comité des Dames" had a special bureau and a most delightful salon. Here everything was refined and restful. The ladies who formed the committee, some of them of the highest rank, were most attentive and hospitable, both collectively and individually, and exerted themselves to the utmost to contribute to the enjoyment of the lady visitors, for whose benefit their efforts were primarily intended, and to enable them to visit comfortably the various places of interest in Moscow and its neighbourhood. But their kindness did not stop here, for they never refused a helping hand to the gentlemen. In addition to a magnificent *soirée* the ladies had a most delightful introductory *réunion* on the evening before the Congress was actually inaugurated. Here might be seen Virchow, under the immediate protection of the Lady President, surrounded by successive relays of ladies, all eager to pet and do homage to the venerable pathologist. He appeared to be thoroughly pleased with himself and to enjoy fully his experiences, as well he might. Altogether, the ladies at Moscow raised a very high standard which it will be difficult to reach at future congresses.

Another scene which will live long in the memory of those who were privileged to witness it is that which was presented at the magnificent Grand Theatre Imperial of Moscow on the occasion of the first general assembly of the Congress and the inaugural ceremony which then took place. It must stand out as the most brilliant and imposing sight which has ever occurred in relation to the medical profession or is likely to occur in the future. I call to mind the opening meeting of the International Medical Congress in London, and it was a very poor show in comparison. I have not the descriptive faculty required to present anything like an adequate picture of the scene, even if time permitted me to launch out in this direction, and it must suffice if I mention some of its more prominent features. The Grand Duke Sergius presided on the occasion and the Grand Duchess with her suite occupied the Royal box. The stage or platform was thronged with the officers of the Congress, State officials, civil authorities, and leading Russian doctors, as well as with representatives of almost every nation. Many were of splendid physique and handsome presence. Magnificent and gorgeous uniforms of various kinds, civil and military, constituted a prominent feature of the scene, which was rendered still more brilliant by the display of medals and decorations on expansive breasts. The whole theatre was crowded with ladies and gentlemen, the former vying with each other in the splendour of their attire and jewels, and many of the latter being also clad in military or court dress. The large majority of us, of course, were not in uniform, but we were all dressed *de rigueur*, and here and there one saw the academic garb indicating a graduate of one of the Universities of Great Britain. It was extremely interesting to see in the flesh men whose names are to us household words and who deservedly hold high positions in our profession in various countries and cities. I will not weary you with any account of the proceedings and will only say that so far as the Grand Duke and the Congress authorities were concerned the speeches were commendably brief. I did, however, particularly note and take an interest in the general behaviour of the audience and their attitude towards the various speakers, to which I must just refer. In the first place I realised what is contrary, I think, to the general impression, that the Russians can applaud in the most vociferous and enthusiastic manner. The nationality of the speakers, undoubtedly influenced the fervency of the cheering; and as regards the speeches themselves, the points which elicited most vigorous applause were brevity, audibility, real oratory, which was exceptional, and the bringing to a close of a prolonged and tedious harangue. But what roused the audience to the highest pitch of enthusiasm was undoubtedly the personality of the speaker. Our old friend Virchow was greeted with a warmth which was both touching and catching. And here I hope it will not be considered out of place, or in the least disparaging to our distinguished representatives, if I give expression to certain feelings that took possession of me on this memorable and exciting occasion. I confess that I felt somewhat envious and jealous for my country and could not help being conscious of a keen sense of regret at the absence of one personality, who, I venture to affirm, had he presented himself on that platform, would have roused the audience to a pitch of enthusiasm which no words could describe or imagination picture. Need I say that I refer to Lord Lister? Among the great events of 1897 which had a special interest for the medical profession in this country will stand out conspicuously the elevation to the peerage of this most distinguished surgeon and teacher in the truest sense of the word. Not only was it the first honour of this kind conferred upon any member of our faculty, but it may be affirmed without fear of contradiction that the choice fell upon one who would have been universally acclaimed as pre-eminently worthy of the position. His brilliant intellect, his true genius, his devoted and untiring scientific and practical work, have achieved such vast and far-reaching results, not only in relation to the medical profession, but for the benefit of humanity at large, that the name of Lister is honoured throughout the length and breadth of this land; while he is revered and beloved for his single-mindedness, his straightforwardness, and his almost too modest demeanour. Not only so, but it is difficult to realise, except by actual observation, how he is positively worshipped by the medical profession in every civilised part of the world and to what extent his teaching and work have influenced and moulded the construction and practice of the modern great hospitals. Am I wrong in affirming that all of us who went to Moscow felt some degree of resentment at our Canadian friends who had enticed Lord Lister across the Atlantic, and that we should have experienced a deep and just pride had he been present to receive the ovation which would have undoubtedly been accorded to him by the united heart and voice of our continental brethren?

The excitement associated with the inaugural ceremony was too much for most of us to enable us to return after the interval to listen to the more formal addresses relating to professional subjects. So I cannot personally tell you anything about them. Nor need I refer to the second and third

general meetings, except to say that they presented a marked contrast to the first, although well attended, and that the proceedings were on the whole somewhat dull and tedious. The final winding up of the business, with its complimentary and farewell speeches and greetings, was decidedly trying to the feelings, especially when the President nearly broke down with emotion, and I have an impression that Sir William Mac Cormac, who, as I have already mentioned, occupied the chair, realised this very keenly.

It is not my intention to inflict upon you more than a brief reference to the sectional meetings and the work for which they were responsible. It must be acknowledged that the accommodation for these meetings was most excellent as regards the rooms in which they were held, these being in some instances quite magnificent, though their acoustic properties were not always everything that could be desired. The section to which I belonged met in the splendid ballroom of the "Assemblée de Noblesses," where in the evening social functions on a grand scale took place. The subjects dealt with in the various Sections appear to have been very much on the old familiar lines and on well-worn themes, and although no doubt the discussions were most interesting and instructive if one could have understood them, I do not suppose that they have brought us any nearer to a final settlement or agreement on any one disputed point. The audiences were as a rule remarkably good and a large number seemed to take a profound interest in the proceedings. On more than one occasion I was attracted by a crowd of eager listeners gathered round a speaker, evidently trying to drink in his every word, and applauding vociferously at the close of his remarks. I naturally concluded that he was imparting some extremely important and original information, but I always found that it was only some old subject that was being dished up, perhaps in a new way. I have no doubt the same venerable themes will be trotted out on similar occasions for many a day to come. Of course, different questions which have been attracting special attention within a recent period were brought into prominence and adequately dealt with, and for the discussion of certain special subjects two or more sections met, so that they might have the benefit of their united wisdom and experience.

It would be a great satisfaction and pleasure to me, if time permitted, to enlarge upon the kindness and hospitality lavished upon the visitors to the Russian Congress, not only by our medical brethren, but by the Czar and Czarina, the Grand Duke and Duchess Sergius, the municipal corporations, the committee of ladies, and others, in the way of banquets, fêtes, and entertainments provided for their delectation and amusement. To these, again, however, I can only make a passing reference and will say nothing as to private receptions or hospitalities. The public gatherings at Moscow were generally on a vast scale and some were truly magnificent, while the kinds of amusements provided were of a promiscuous character to suit different tastes and inclinations, including amongst others various descriptions of music, not always particularly agreeable to the ear, though interesting as illustrating Russian styles, and of course dancing. One of the most striking features of some of the entertainments was the enormous quantity and variety of foods and drinks provided in the way of refreshments. And a still more wonderful sight was the rapidity with which the tables were cleared of their good things and the extraordinary capacity which many individuals exhibited for accommodating any quantity of eatables and drinkables in every conceivable combination. Truly an instructive lesson in "dietetics" from a "medical congress" and by no means the first of a similar kind! I understand that those who went to St. Petersburg from Moscow were there regaled on the same magnificent and lavish scale, but as I was not one of the number I cannot speak from personal experience or observation.

Amongst the entertainments provided for us at Moscow there were two to which I feel bound to particularly refer for a moment. The first was a "religious concert" given by singers of "L'Ecole du Synode." Such a combination of male voices, especially basses, and such superb singing it would be almost impossible to equal, and I think I may say for those who were present that this concert was an immense treat and gave us a very exalted idea as to what Russian music is capable of. The other was the delightful garden party given by the Grand Duke and Duchess Sergius at the Alexandrina Palace on the Friday after the Congress was really over to console those who could not get away owing to a failure of train accommodation and to try to make their enforced stay pleasant and agreeable. Those who were thus circumstanced had no reason to regret it, for a more enjoyable as well as refined function of the kind I never remember. Several bands discoursed splendid music; the refreshments were really beyond description; and the cordial personal welcome with which their Imperial Highnesses received their guests, chatting with them affably and without any restraint or reserve, produced a pleasing and grateful impression which, whatever happens, can never be effaced. This gracious act of hospitality on their part formed a delightful and most soothing conclusion to the Moscow Congress.

In an earlier part of this address I intimated that I might feel myself at liberty to refer to matters not immediately connected with the Congress itself, and now, Mr. President and Gentlemen, I do not offer any apology for troubling you with some remarks about Moscow and may drag in incidentally certain points relating to Russia as a country and the Russian people, as well as to questions with which we are more immediately concerned. To the medical profession the conditions of great cities must always present interesting and attractive features and the comparison of foreign cities with those in this country affords much food for thought and reflection. The problems that constantly face us, and with which it is a main part of our duty to attempt to grapple, are not only extremely important and difficult to deal with, but often exhibit a most appalling and tragic aspect. The ideas entertained by the mass of our people who have never ventured beyond these shores with regard to other nations, are generally as amusing as they are narrow, insular, and erroneous, and they would be very much astonished if they were told that London by no means always compares favourably with many foreign cities, even in countries which are supposed to be mediæval and essentially backward in civilisation. I think those of us who went to Moscow had our eyes very much opened on this matter and many of our preconceived notions and ideas were rudely swept away, while others were greatly modified and corrected. We would be inclined to agree with Sir Wemyss Reid, who in an interesting article in the *Nineteenth Century* entitled "First Impressions," gives an account of a visit last autumn to St. Petersburg and Moscow, amongst other cities, and expresses himself as quite taken aback by what he found in the latter city. He writes: "I had thought of it, as I imagine most of us do, as the decaying capital of that older Russia which is passing into the stage of tradition—a sleepy, old world city where ancient customs and national usages still survived and little beside was to be met with. I found it a huge city numbering nearly 1,000,000 inhabitants, where side by side with the traditional usages of old Russia and, above all, its external devoutness of carriage and demeanour, is to be found the most marvellous development of industrial and commercial enterprise and activity. The streets were as crowded and as full of bustle and life as those of London or Manchester; the groves of tall factory chimneys enveloping the suburbs reminded me of Birmingham. The markets were filled to overflowing both with merchandise and men. The shops were certainly not inferior to those of St. Petersburg and everywhere there was the bustle, the unending activity which bespeaks the existence of a great community engaged in the full work of life. It was only slowly that what I saw enabled me to realise the truth about Moscow—the truth that it is no city of the dead, no relic of mediæval times, but the living capital and centre of a mighty nation, which, though it may wall itself in against western ideas and manners, has an overflowing life of its own and an energy which it is expending freely in a thousand different directions. Those who seek to realise what Russia really is and what enormous potentialities of growth and development she possesses within herself must go to Moscow." Of course, this general aspect of Moscow naturally interested the visitors to the Medical Congress, in common with others, but what could not fail to prove specially attractive to them was to observe the marvellous progress and the immense strides which have been made in scientific and practical medicine, and the remarkable developments in the way of hospitals and institutes for the study and treatment of disease from every conceivable point of view. I think I am expressing the general feeling when I say that not only were we vastly astonished, but some of us were consumed with envy, for we could not conceal from ourselves the fact that in many respects even Moscow, to say nothing of St

Petersburg, is medically and surgically far ahead of this great city of London, with its boasted advanced civilisation. The magnificent and splendidly equipped Clinical Hospital at the Dievitchie Pole, with its separate buildings for every department of medicine and surgery gathered together in one place, on an area of between fifty and sixty acres, and constructed on the most approved and advanced sanitary principles, was a revelation to us all of what Russia is capable of. Here were to be seen every kind of modern appliance for clinical investigation and treatment; while there were special institutes set apart for the study of pathology, bacteriology, pharmacology, and other branches, with every possible modern requirement for scientific investigation and research. What a magnificent field and what an infinite mass of material of every kind for clinical instruction and study, all arranged and classified in the most admirable manner for immediate use. I confess that I could not help contrasting, to our decided disadvantage, this methodical arrangement with our numerous scattered hospitals, where so much valuable material for clinical purposes is absolutely lost, and such excellent teaching is often wasted, or at any rate does not produce its legitimate results, from a want of proper concentration and organisation. With regard to investigations and researches which have for their sole object the advance of medical science and art, need I say that the disabilities which hamper our profession in this country must, while they last, be a continuous check on progress and discovery, and a constant source of resentment and indignation, when we contrast the conditions under which our scientific men work with those which prevail in Russia and other countries, where ignorant, self-seeking, or sentimental faddists are not allowed to have their way, or by their gross and calumnious misrepresentations to mislead the public as to the nature as well as the aims and intentions of the investigations carried on in relation to medicine and surgery by men who have for their paramount aim the well-being of humanity and the relief of suffering. Nor are they at the mercy of a certain class of so-called "statesmen" and "politicians," I care not to what party they belong, who, in order to catch a few votes, will support any outrageous measure which has for its purpose the prevention or stamping out of rational and legitimate scientific research, and who, when it suits them, treat the medical profession with the utmost contempt.

The subject of operative surgery hardly comes within my province as a physician and I should not refer to it at all on the present occasion were it not for a personal experience when at Moscow which I suppose I ought to have looked upon as a special treat. Speaking generally, I think I may say that the operating theatres in the Russian hospitals are equal in every respect to anything that can be found in any part of the world, while the thoroughness and perfection with which antiseptic and aseptic methods are carried out leave nothing to be desired. Nor could one fail to be struck with the vast number, variety, and ingenuity of the instruments and apparatus for operative as well as other purposes which were exhibited for our inspection. There are also private hospitals in Moscow where operations of various kinds are performed and these seem to be equally well provided with every modern requirement. Whether such institutions should be imitated or encouraged may, however, be a matter of opinion. It was at one of them that the experience to which I have referred took place. Purely out of kindness and as an act of hospitality I was invited to a "private view" of an exhibition of "cerebral surgery." Mr. President and Gentlemen, I did not enjoy it, curiously enough, and as soon as possible made my way out of the operating theatre. I was met by what I can only describe as a mob of men and women who nearly crushed me in their struggles to gain an entrance into the theatre, and when it could not contain any more those who were left outside crowded round windows where they might possibly catch a glimpse of the public display of operative surgery which was now about to begin. My hurried flight from the scene prevents me from giving further details. This scene and the loud applause which I heard on another occasion at the close of some brilliant operations at the Clinical Hospital, and which was rather a shock to one's feelings, gave form and expression to two thoughts which have for some time been vaguely floating in my mind, and which I only dare venture to suggest here in the presence of eminent surgeons with the profoundest respect and humility as well as with fear and trembling. In the first place, is it not just possible that with the immense advantages and facilities possessed at the present day for the performance of formidable operations of various kinds, with the aid of anæsthetics, antiseptics, and suitable instruments of every description, and the truly marvellous skill which surgeons have acquired in numerous directions, there might be a tendency to perform such operations on insufficient grounds and more frequently than is actually warranted by circumstances? Then I do not think the fact can be denied or blinked that there exists rather widely a morbid desire or craving to witness what may be fairly termed "sensational operations," or, at any rate, to be present at them, even when it is impossible actually to see any part of the procedure. Such an operation proves so attractive to the modern medical student that it will practically empty the ward or the lecture theatre, and not the most brilliant or popular clinical teacher or lecturer can entice him from the scene or bring him down to the level of the humdrum subjects which he will have to face at examinations or with which he will have to deal in the ordinary practice of his profession. Up to the present I am glad to think that applause after operations, however skilfully and brilliantly performed, would not be tolerated in this country, and I hope it never will be. It would be a mournful day when that consideration and respect for human life and suffering, which have been the glory and boast of the medical profession from time immemorial, should ever be weakened or lost, or when there should arise the least ground for the suspicion that the surgeon's art aimed in any way at rousing the mere admiration of the lookers-on or appealed in the slightest degree to the modern craving for excitement and sensation.

The remarkable institutions which are met with in different places in Russia, but which have reached their highest development in Moscow, known as the *Maisons des Enfants*, or Foundling Hospitals or Homes, present many points of interest to the medical profession and I cannot pass them by altogether without notice. Their history and objects are well known, or at any rate can be gathered from any of the books written as guides to Russia. It was a strange notion of an extraordinary woman—the Empress Catherine II.—to found an asylum or home for illegitimate children, and whatever the motives might have been which prompted the idea it cannot be said that its outcome has tended to promote morality or that the "great care and devotion to infants born to shame and poverty is the highest form of development of rational philanthropy," as Sir Wemyss Reid well puts it. It means the "preservation every year of thousands of lives to swell the great army of want and suffering." The mortality, however, is very high, for which one really cannot help feeling thankful. The number of annual admissions into the Moscow institution now exceeds 17,000 and the history of its progress clearly demonstrates that its establishment has vastly encouraged illegitimate child-bearing. When paying it a visit, although one could not help being deeply impressed with the marvellous extent and character of the work, the excellence of the arrangements, sanitary and other, the general air of well-being and comfort, the kindly and sympathetic behaviour and actions of all the *personnel*, and especially the thoroughly systematic methods adopted under medical supervision to sustain life and to protect against disease, the sight was not a pleasant one, either from the side of the infants or the mothers, who are practically the nurses and who certainly did not give one a very exalted idea of Russian women or girls, for a large proportion of them were quite young. Indeed, I agree with Sir Wemyss Reid that it was a "painful spectacle," though at the same time one full of pathos. A particularly objectionable feature to witness was the number of wretched specimens of recently-born infants which they were endeavouring to "incubate" into life. And the sight reminded me that even in this country "human incubators" are just now assuming a disagreeable prominence. It is a dangerous topic to venture upon as to how we should deal with new-born infants who are obviously destined, if they survive, for a life of disease and probable suffering and in whom the spark of vitality is smouldering to extinction. I yield to no one in my respect for human life and in my tender sympathy and affection for children, but it has sometimes struck me that our efforts to sustain existence under such circumstances as I have just referred to and others are not always in the direction of true kindness towards the poor little souls. At any cost I will go so far as to say that if an infant needs an incubator to launch it upon "life's tempestuous sea" such an apparatus ought never to be

employed without the most conscientious thought and consideration, and its use always demands the utmost rational discretion. To exhibit an incubator in active work upon a human life in places of public entertainment, which is one of the attractions offered nowadays, does not tend to raise one's estimate of modern humanity and is only another example of the morbid craving for some new excitement which prevails so widely at the present time.

I do not intend to speak about the remarkable sights at St. Petersburg and Moscow, with their environs, in the way of palaces, gardens, museums, churches, and monasteries, except to make a brief allusion to the churches generally and the religious aspect of the people. The costly splendour and magnificence of many of the churches are beyond description, but one could not help feeling that much of the wealth thus lavished might have been better employed in other ways. The Kremlin was of course a constant centre of attraction and interest, but some of its churches are more curious than beautiful. The services are highly elaborate, spectacular, and impressive, and the ritual is gorgeous and dramatic. The earnest and devout reverence of the people of all classes, their fervent acts of worship, and their devotion to their religious ceremonies and practices, both within the church and outside, were most remarkable and sometimes bordered on the grotesque. They seemed to have a profound and unwavering faith which to an outsider appeared hardly distinguishable from the most abject and ignorant superstition. There were two features in which the churches presented a marked contrast to those of this country. There was an entire absence of seats and everybody had to stand except when they were engaged in the act of kneeling or prostrating themselves on the floor. Then there was no distinction of persons, but the rich and poor, the well dressed, the working man, and the ragged beggar were all massed together in one common and miscellaneous crowd. I must say that the experience was by no means always pleasant, especially when there was a crush. The odours emitted were certainly not the "odour of sanctity"; and one could not but feel conscious of the special facilities afforded under the circumstances for the conveyance from person to person, not only of infective microbes, but of more easily recognised entomological specimens. A very tragic illustration and object lesson of the possible state of things in a Russian church was afforded by a terrible event which has been reported in the newspapers since the Congress. A consecration service was being held in a crowded village church when a panic was caused by the cries of "fire" and "help" from the outside. Of course the worshippers crushed towards the door, the result being that 74 persons were killed and 160 more or less seriously injured. There was no fire, but as the ventilators had not been opened at first it became necessary to throw open somewhat suddenly both ventilators and windows, whereupon dense clouds of vapour issued forth from the steaming congregation within, which was mistaken by the crowd outside for smoke, especially as at the same time a blaze of light was produced by the lighting up of all the candelabra. To an outsider religious life and practice in Russia certainly do not present an attractive aspect from a medical point of view, and they can hardly be regarded as contributing to the physical or moral well-being of the people. Nevertheless, during the comparatively recent so-called "agreement" between Russia and China it was rather amusing to read in an extract from an article in a St. Petersburg paper that Russia was going into China as "the standard-bearer of Christian culture and civilisation." I wonder how the Chinese will like it!

The problems that present themselves in relation to great cities as regards their material, sanitary, social, and moral conditions and the evils to be contended against are in the main common to all and are but too familiar to us as a profession in this vast London. Taking a comprehensive view of our metropolis and comparing it with foreign cities I can only give vent to my own feelings by saying that it is a most contradictory, inconsistent, aggravating, and tantalising place. No one can deny for a moment that, apart from its unavoidable climatic drawbacks, it has attractions and advantages which can be found nowhere else; and some of these come into conspicuous prominence after a visit to such cities as St. Petersburg, Moscow, and Warsaw. Amongst others one seems to breathe a freer air and to be relieved of an indefinable vague sense of unrest, insecurity, and danger, which amidst all the courtesy and kindness shown to us I think many visitors to the Congress could not help feeling conscious of when in Russia. It may be a question indeed whether freedom in London, in common with every other part of this country, is not carried rather too far and whether sometimes "liberty" is not allowed to degenerate into "license." The fact cannot be ignored that not only in London but in many other cities and towns within this realm rowdyism, ruffianism and acts of robbery with violence in our public streets, even in broad daylight, are greatly on the increase, so much so that one of the metropolitan magistrates spoke strongly not long ago about what he called a "reign of terror" in his district. I really think it is safer to walk in the streets of St. Petersburg or Moscow than in many parts of this city. Moreover, whether we are doing the right thing in permitting indiscriminate alien immigration to the extent which is at present the rule is a matter for serious consideration. Apart from other aspects of the subject I have been recently informed on reliable authority that in certain districts, not in the "east-end" either, they have to be constantly fighting against the most disreputable characters, who pour in chiefly from Russia and Poland, and who manage to get possession of houses of ill-fame as rapidly as they are closed, carrying on the most nefarious practices and being an intolerable nuisance and curse to the neighbourhood. Surely such a state of things ought not to be allowed to continue for one moment, and it is but fair to the inhabitants of London that some discrimination should be exercised as to the kind of people who are welcomed into our midst. And in this connexion I cannot refrain from uttering an energetic protest against a crying evil which constantly stares us in the face in this immediate vicinity as well as in other districts, and which has reached such a pitch that even the clergy are roused to denounce in the daily press what they rightly term "a grave scandal." I allude to the extraordinary laxity shown by the public authorities in permitting the most shameless and repulsive women to parade our principal streets and thoroughfares in open day, especially at the time when they are most frequented, to flaunt their calling in the most ostentatious manner and to molest passers-by with their solicitations. Most of these creatures are also obviously of foreign importation and what they must think of a great city which actually seems to invite them to a line of conduct which would not be tolerated for one instant in any other civilised city in the world I really cannot imagine. Efforts are being now made in many quarters to promote purity, and not only have we the most cordial sympathy with such efforts, but we must not mince matters, and it is time for us to speak out plainly and boldly. Let us be consistent, however, and practise a little common sense by doing our utmost in the first instance to put down temptation in every form. We shall have no difficulty in emphatically endorsing a resolution passed at a recent influential meeting held at the Guildhall in connexion with a "special crusade" against gambling, intemperance, and impurity calling for immediate action on the part of all good citizens and of the Legislature with a view to effecting, amongst other reforms, the "promotion of energetic action on the part of the police authorities for the suppression of street solicitation." In one of the letters emanating from the clergymen already referred to they say: "We are more than ever persuaded that the time has arrived when the properly constituted authorities should take the needful steps to remove an evil which is a decided blot upon the social system of a great Christian city." This seems to me to be an exceedingly mild way of putting the matter. They are more practical when they write: "May we not also reasonably expect that the evils to which we directed attention (in a previous letter) may induce some action on the part of the public authority to protect passengers of both sexes from interference whilst they are making lawful and proper use of the public thoroughfare." The Bishop of London, speaking on the "Promotion of Purity" at a conference held not long ago, remarked that it was always possible to get a high-minded and God-fearing physician who was ready and willing to speak to men—and, above all, to young men—about the temptations to which they would be exposed, and whenever this had been done in his experience it had always been productive of the best results. This, no doubt, is true, but I fancy there are few of us who possess the qualifications necessary for carrying out such a work successfully and efficiently. We can all, however, unite in expressing our utter condemnation of the existing state of things in the capital of this great country, and I have thought it my duty, as fairly coming within the scope of my subject, to give vent to what I venture to believe must be the unanimous feeling and sentiment of this

Society and of the medical profession at large with regard to a grave and pressing evil, and to join others in strenuously urging upon our public authorities, whoever it may concern, the imperative necessity for immediate and radical reform, in order to sweep away a scandal which is not merely a "blot upon the social system of a great Christian city," but which must sap the very foundations of decency, morality, and order in any civilised community.

The question of intemperance is a very pressing one in Russia and it was interesting to meet in Moscow a few who, like many temperance reformers in this country, strive to influence those with whom they come into contact by their personal example, being strict total abstainers. I have recently seen an announcement that the enormous increase of intemperance has led the Russian Government to take the question into its own hands and as a first step the sale of spirits in the country is gradually being turned into a Government monopoly. The Government is also directing its attention to counter attractions to the public-house and has appointed a "temperance curatorium" in St. Petersburg, one of whose duties is to provide these. Here is a useful hint to our legislators and to the authorities who have to contend with the same evil in this country. It seems to be a general belief that drunkenness is far more prevalent in Russia than amongst our people, but from what I have seen and heard I am not at all sure that there is any real foundation for such a notion. At any rate, we cannot boast that the inhabitants of any part of the United Kingdon are models of temperance and we are not in a position to throw stones at any other nation. The sights that constantly obtrude themselves upon us in London, even in the "West-end," are disgusting and appalling, and I confess that they often produce in me a feeling of profound humiliation as well as of utter impotence, hopelessness, and despair. And yet how can we wonder at the state of things when we observe the temptations and attractions presented on every hand, as contrasted with the so-called "homes" of the people, in the shape of luxurious public-houses, which almost vie with the Russian churches in their gorgeousness and magnificence. It may be interesting to note that the Russian working-classes appear to be much more methodical in their drinking habits than our people, with whom, by the way, they compare by no means unfavourably in appearance and manners, so that the effects of excessive indulgence may not interfere immediately with their regular employment, and I fancy that the Government has something to say in this matter also. Judging by current events it does not look as if the drink traffic in this country is likely to be controlled or checked in any way for many a day to come. This is easily explained, not only by the inherent sentiment planted in the breast of every "true Briton," that he will never, if he can help it, permit what he calls his "liberty" to be interfered with, but also by the powerful individuals and combinations of persons who are directly or indirectly interested in this traffic, by the enormous fortunes and large dividends which it yields, and by the too tempting contribution which it makes to the revenue. It must be acknowledged that this state of affairs does not strike one as being altogether satisfactory or gratifying. I certainly am no advocate for entering upon the impossible task of trying to make people sober "by Act of Parliament" or any other compulsory method, except in the case of habitual inebriates, nor should I like to see any meddling interference with fair dealing in alcoholic drinks, but as medical men we cannot shut our eyes to the practically unlimited facilities and encouragement given for the abuse of alcohol and the establishment and continuance of intemperate habits, not only in this city, but in the country at large, and of the terrible consequences resulting therefrom. Here, again, surely "liberty" has been allowed to degenerate into "license" and it is our duty so far as lies in our power to support every rational measure which has for its object the promotion of sobriety, coupled with a due recognition of the established and legitimate rights of those who deal in articles of commerce which, when used intelligently and in moderation, are, in my opinion, not only harmless but capable of contributing in no small degree to the comfort and well-being of the human race.

I have thus far been dealing with the more glaring evils in this city and country which a comparison with Russia brought prominently before my mind, but I must still note some minor points in relation to London in which we are lamentably deficient and where we might learn many a valuable lesson from other capitals. The causes of these defects are many and various, but they are obvious enough, though at the same time by no means easy to overcome. Amongst them may be mentioned the obstructive influences associated with long-established "rights and privileges," vested interests, monopolies, and corporations; conflicting opinions and interests of official bodies; a complete want of any comprehensive or controlling organisation; feeble and often ignorant though thoroughly self-satisfied vestries; general apathy and an indisposition to make any effort against existing abuses, but to let things slide—a failing to which we are all very prone; individual self-seeking and absolute selfishness, without a spark of consideration for others; and, I have a strong impression, no small amount of "jobbery," as well as "bribery and corruption," in many directions. There can be no doubt that the laws and regulations intended to benefit the community at large are often tacitly ignored or even treated with open contempt and defiance; and it has struck me that a short experience of autocratic government might do us no harm and help to put matters right. Comparing London with Moscow I have been told on good authority that the latter is about the most insanitary city in the world and I can quite believe it. Certainly one could not help noting a general objection to fresh air and ventilation and as a rule an absolute neglect and disregard of all sanitary conditions, precautions, or regulations. In these respects no doubt we are on the whole far in advance, not only of Moscow, but of many other cities, though there is still much to be desired. Indeed, have we not frequent revelations showing that not only in London but in many other cities and towns, as well as in rural districts which nature has made lovely and beautiful, the most elementary sanitary laws and conditions are absolutely ignored, and if the descriptions given are true we have quite recently had brought prominently under our notice in the press a state of things in one of the neighbouring counties which can only be fitly characterised in the words of the *Times* as "grave scandals" and a "disgrace to civilisation and humanity." Taking a superficial view of things Moscow appeared to be decidedly cleaner than London and as for the lighting of the streets we are not in it. Indeed, I am afraid that our metropolis has an unenviable reputation for being dirty and badly lit, and our friend and would-be reformer *Punch*, in his last Christmas number, includes among what he calls "Some Christmas Waits"—"A system of illumination and purification of the London streets which shall be at least equal to that of the second-class European capitals." Those of us who reside in this locality are thoroughly familiar with these two defects, but we must not altogether hide our light under a bushel, for there is one example of strenuous if misdirected energy which really deserves publicity, though I must say I have witnessed the same performance in Moscow and other places. We must not, however, withhold the honour specially due to London and to the Marylebone Vestry and sanitary authorities in particular. Given a series of wet, filthy, muddy days, the streets are left absolutely untouched and even the professional crossing-sweepers are then generally conspicuous by their absence. To cross Portland-place or Harley-street, for example, under such circumstances is an experience neither good for the "outward man or woman" nor for the temper. But let there come an absolutely dry day, with a high wind and heaps of dust, mixed with an abundance of desiccated excrement and expectoration, and then you will find some ten or a dozen lusty men vigorously sweeping these and other thoroughfares and choking the passers-by with the volumes of a choice and miscellaneous assortment of microbic and other abominations which they raise by their efforts. The *rationale* for this performance is not evident at first sight, but it has occurred to me that it might possibly be intended to promote the interests of the medical profession in this neighbourhood by exciting disease and spreading infection, as a slight return for our help in so greatly enhancing the value of property and our large contributions to the Imperial taxes and the local rates!

There are other aspects from which London might be fairly criticised even as compared with Moscow and other cities supposed to be far behind in civilisation, but time warns me to forbear. I will only mention the matter of overcrowding, which is further so often associated with obvious and sometimes the most revolting insanitary conditions, which ought not to be permitted for one instant. All this, of course, is perfectly well known in a general way, but the disclosures made from time to time in the newspapers, especially in connexion with inquests, are truly shocking and appalling. In

the course of a discussion a short time ago my friends Dr. Corfield and Dr. Poore both agreed in letters to the *Times* that the huge infant mortality in London is mainly due to overcrowding. Surely this state of things might easily, and ought to, be kept somewhat in check at any rate, and Dr. Poore well writes: "Is it not time to do something to try to arrest the overcrowding in London instead of regarding it with complacency because there happen to be more unhealthy cities elsewhere?" Whether the solution of the difficulty advanced by this eminent authority in sanitary matters is correct or not I do not feel competent to judge, but my impression is that the millennium is not yet in sight and will not come in our day.

I hope, Mr. President and Gentlemen, that I may not be regarded as having gone beyond my province in the preceding discussion of some of the aspects of London with which we as a profession are immediately concerned and in which we have a direct interest. I hold it to be our duty on every possible occasion to bring prominently before the public any glaring scandal or abuse as well as minor imperfection in our social system which tend seriously to impair the health or to interfere with the well-being of the community at large, without regard to class or station in life. Personally I felt that this was a legitimate opportunity of which I might justly take advantage. Not that I flatter myself that my remarks will have the slightest practical outcome or effect. Things will go on just as before and we must merely await as patiently as we can the results of enlightened progress. I know not whether we are to be governed in the future by the "county council" or by separate "municipalities," nor do I feel competent to express any definite opinion as to which is the better method. We can only trust in Providence and hope that, to whatever body or bodies may be entrusted the control and guidance of our affairs, they will bring to their great and noble task intelligent thought and consideration, founded on due knowledge and experience, honesty of purpose, and an earnest desire for the welfare of their fellow citizens.

Mr. President and Gentlemen, this is the age, amongst other characteristics, of vast association meetings and congresses of all kinds—national and international—and the questions have been raised whether these gatherings are of any practical value whatever or serve any really useful purpose and whether they should be maintained? I have read some particularly disparaging comments with regard to their social developments and they have even been compared to "huge picnics." So far as International Medical Congresses are concerned, although for obvious reasons there is no actual necessity for them at the present day, yet it would be a pity to abolish them altogether. If they do nothing more, they may possibly form a link to bind nations and peoples together in unity and concord and to promote peace, it may be, when "relations are strained." But, further, my own opinion is that while they certainly are capable of working infinite mischief, on the whole they do a tolerable amount of good in the way of guiding the profession generally into right channels—sometimes at critical epochs; of promoting and developing that which is worthy of encouragement and support; of bringing into prominence novel discoveries relating to the science or art of medicine and surgery which are of real merit; and, on the other hand, of keeping in check, or entirely suppressing if need be, any tendencies which are detrimental to the true dignity and advancement of our profession or to the practical interests of those with whom we have to deal as patients. As regards the Moscow Congress, from what I have previously stated, it may be gathered that its outcome has not led immediately to anything very remarkable or striking. It was not, so far as I know, signalised by any unusually brilliant or sensational incident from a medical or surgical point of view or by the announcement of any startling discovery. For this I feel personally profoundly thankful, for my firm impression is that the medical profession has at the present time quite enough material for investigation and study to engage the attention and best efforts of its most able and energetic members for many a day to come. Nor, I am glad to say, did this gathering afford any undue encouragement to certain modern ideas and tendencies which cannot fail to give occasion for anxious thought, not unmixed with foreboding, to those who have the true interests of our vocation at heart.

After some hesitation I have come to the conclusion that my text fully entitles me to call attention to some of the more pronounced of these tendencies and to offer a few comments upon them, which, of course, only express my own personal views. In the first place there is the now somewhat stale question of "specialism," which is always with us, but the process of "splitting up" is still going on, and where it will end it is impossible to say. I will merely remark that it has already reached a pitch which can only be described as ridiculous and absurd, and that the incalculable mischief which it is working must be obvious to any rational and disinterested observer. Then there is the tendency which undoubtedly exists to run certain branches of medicine almost entirely on so-called "scientific" lines with little if any regard to their practical relationships or bearings. This is all very well for gentlemen who spend their days in the calm retirement of some quiet laboratory, enjoying the satisfaction and delight which scientific research, with its marvellous results and achievements, must always afford. But it is a very different matter for the active practitioner or physician who has to study and combat disease in its manifold manifestations and combinations in actual living patients, with all their personal idiosyncrasies and individualisms. The tendency is also evident in the education and training of medical students at the present day, for whom the more scientific branches of study naturally possess decided attractions. It will be an evil day, however, for the medical profession should this tendency be unduly encouraged or developed, or should those who are preparing for its active duties be taught to ignore or make light of its more practical problems and aspects.

No one who has watched the progress of events can fail to be struck with the advances and remarkable discoveries which have been made during recent years in the science and art of therapeutics. This very fact, however, has led to certain developments, for which we as a profession are more or less responsible and which are even now doing much harm, while they give occasion for serious anxiety as to the future. In the first place there are the extraordinary ideas now so widely prevalent with regard to supposed "cures!" I have even met with medical men who have rather wild notions on this point, but I hardly imagine that any rational and honourable member of our body would go quite the length which a very large proportion of the laity have reached. Their views are that a patient invariably suffers from some disease as a distinct entity, that every such complaint must have its cure, and that it is our business to find it out and practise it. Hence they are ever on the look-out for some sensational discovery or some novel line of treatment which shall serve the desired end in relation to this or that complaint. If one is not "up-to-date" with regard to the newest and most recently advanced "cure" for the more familiar diseases—for example, typhoid fever, influenza, or phthisis—and unless one is acquainted with every "advertised remedy," generally recommended by some individual of no scientific or professional standing or, it may be, utterly unknown to fame, he is looked upon as being "behind the times" and only fit to be shelved. I can affirm from personal knowledge that not a few have a fixed idea that when we go to a Medical Congress our object is to bring away with us, actually or potentially, definite "cures" for various complaints, the outcome of the collective wisdom of those who take part in its discussions, and they cannot understand otherwise what business we have there at all. As intimately associated with this idea comes the bewildering succession of new therapeutic agents with which the drug-market is being constantly inundated and with every one of which we are expected to be familiar. No doubt many of them are useful for particular purposes, but very few become permanently established as really valuable remedies. Another most mischievous practice to which we cannot shut our eyes in these days is the tendency to run some special line of treatment which happens to be "the fashion" at the time for every case belonging to a certain class of diseases, without judgment or discretion or any rational consideration as to its appropriateness in individual instances. I have found by bitter experience that unless you are prepared to fall in with the prevalent views and to advise or practise such treatment under all circumstances, even against your better judgment, conviction, and conscience, the public will have none of you, and again you are delegated to a "back seat." To sum up the whole matter, patients and their friends have been taught to believe that no matter what the conditions may be with which the medical practitioner has to contend, modern science and skill ought to be able to cure them straight off, or at any rate to relieve their

sufferings under every possible combination of circumstances, and they as a rule expect that these results can be achieved by a mere "prescription" or a "bottle of medicine."

There is still another tendency to which I must refer and which, if persisted in, is likely to lead to more and more trouble as time goes on, and that is the temptation to give expression and utterance to prophetic assertions, predictions, and promises with regard to prolongation of life, eradication of disease, marvellous improvement in the health of individuals and communities, and so on. For the world at large the outlook is truly rosy, but for the medical profession it is black indeed, seeing that its members will "have no work to do" and in process of time it must inevitably become extinct. It goes without saying that every one of the infectious complaints will be completely routed and annihilated even within a short period, and in the meantime every human being shall be so inoculated as to be rendered immune against the whole lot. Gone will be the days of "stirring epidemics of influenza to blow big dividends" to a certain company! I have seen a statement in print that two of the most eminent authorities in our profession, gentlemen for whom I have personally the highest esteem and respect although compelled to differ from them, have expressed their firm conviction that pulmonary phthisis will be eradicated—one says within 200, the other within 50 years. I have often been amused as well as amazed with the glowing prophecies made in irresponsible lay newspapers and periodicals or journals and with their almost hysterical outbursts about the "advances of science," the "marvellous achievements of medical skill," and similar "tall talk." That does not signify, however, very much and we cannot prevent such effusions. But when the influential medical press indulges in the same theme beyond what is strictly in accordance with facts, or when some well-known and prominent scientist or physician paints a radiant picture of what is going to happen even in the near future, it is a very different matter. The laity naturally believe them and pin their faith on their statements. Then follows disappointment, not unmingled with resentment, that the predictions do not come true and that the millennium does not arrive. And yet, Sir, it does not. The contagious affections are still amongst us and in full force, and we are from time to time startled by the breaking out of a virulent epidemic of some grave disease of this nature which we had flattered ourselves had been practically exterminated and which we find it almost impossible to check or to cope with successfully. And this does not result from any want of knowledge as to how to deal with these complaints and how to prevent them, or of devoted skill in treatment, but from the mere force of circumstances which are obvious enough. The fact seems to be that those who make what I must term rash predictions do so from an entirely theoretical, scientific, or "laboratory" standpoint. They appear to forget altogether the inevitable conditions of existence and social life, among civilised perhaps even more than uncivilised communities, and they also ignore entirely such factors as human weakness, appetites, lusts, passions, and selfishness. Do not let us be led away with exaggerated ideas and expectations and imagine, for example, that because the tubercle bacillus has been discovered such a disease as pulmonary phthisis will soon be a thing of the past. We may strive as a profession, as we do, to our honour be it said, to promote the adoption of every preventive measure at our command, we may go so far as even to try to stop people from kissing, as well as expectorating just when and where they please, but I venture to predict (and at any rate I am safe in doing so, seeing that no one now present will have the chance of contradicting me when the time comes) that so long as the world lasts consumption will still be one of the chief scourges and dreads of its inhabitants.

In the preceding remarks it has not been my intention to say one word against rational progress in relation to the subjects which I have discussed, or the adoption of any method or measure which can be of real service for purposes of clinical investigation and diagnosis, or for the prevention and active treatment of disease. By all means let us do all in our power to promote sound health and the general well-being of humanity and to encourage them to take a hopeful and optimistic view of the future, so far as is consistent with common sense and actual hard facts. But let us never forget that we have to protect our patients and fellow-creatures against themselves, if I may so speak, as well as against numerous dangers from without. A moment's consideration will show that the tendencies against which I have been uttering my feeble protest afford direct encouragement to, and open up unlimited opportunities for, charlatans and quacks of every kind. We must charitably assume that there are none actually within the ranks of our profession who come under this category, and yet it now and then happens that the General Medical Council find it necessary to remove from the Register one of its members for downright and unconcealed quackery. Not that in the scandalous and at the same time humorous state of our laws with regard to practitioners of medicine—as contrasted with the legal profession, who take very good care of themselves—it makes the slightest difference to the individual so expelled, unless it be in his favour, for he can go on just as before, or even with additional *kudos*, posing as the victim of professional injustice and jealousy. And then comes the matter of advertisements. Really, Sir, what is the use or advantage of any Congress or even of this venerable Medical or kindred Societies, with their regular meetings, reading of papers, and learned discussions, when in almost any lay, not to mention pharmaceutical or medical, paper you will find not one but any number of "cures" and "remedies" recommended for every possible disease or symptom, now frequently with the additional attraction of the photographs of grateful patients before and after treatment? Even such a journal as the *Times* sometimes inserts advertisements of which I hardly think those who are responsible realise the significance. Not long ago I cut this advertisement out of the most prominent column on the front page of this leading newspaper: "Dr. [a foreign name, but not Koch] has discovered the Bacillus of Tuberculosis and is able to heal this malady." Then we are informed that "the Court Physicians" prescribe a certain preparation for our "Royal Family" which of course has the power of curing every "ill that flesh is heir to"! But of all the advertisements, usually supplemented by the most flagrant and grotesque "puffs," which are a scandal to this country and to the present "enlightened" age, none approach within measurable distance in barefaced impudence and downright misrepresentation those found in much of the so-called "religious" or "Christian" press! These papers wholly belie in this respect the titles they have appropriated and make one feel almost ashamed of words with which we are accustomed to associate all that is true and great and noble. They are more especially the means of propping up and foisting upon the public that particularly offensive species of the genus "quack" who under the guise of religion and religious motives is allowed by our laws to prey unchecked upon ignorant and confiding simpletons by pretending to have discovered a "specific" for some grave and widely-distributed malady which he will dare to hold out as a "certain cure" even at the last extremity, when death is at the very door! I affirm that which I have actually seen. No wonder such creatures amass large fortunes. These advertisements and puffs are then passed on to some of the so-called "Society" papers, and so the game goes on! It behoves us as a profession to give thoughtful consideration to the question how far we are responsible for these and kindred evils and to be particularly careful at the present time not to encourage them in the least degree by any mistakes on our part.

There is another aspect from which we need to be specially cautious and circumspect just now as to what we say and do, at any rate in this country. It is but too evident that our profession is being watched with suspicious and unfriendly eyes from more than one quarter, that our words and actions are being subjected to severe and hostile criticism, and that some of our most cherished and deeply-rooted doctrines and practices are being vigorously attacked by powerful individual and combined forces. Certain people seem to think it their duty and calling in life to take every opportunity to oppose whatever we try to do for the good of humanity and for the real advancement of medical science and art, and they are ever on the look-out for some malignant plot of medical Jesuitry. The fact must not be ignored that even within our own ranks there are men of ability and of high scientific and practical attainments who honestly and conscientiously differ from the vast majority of their brethren on important questions and whose actions are governed accordingly. We can only regret that such should be the case, but at the same time must treat them with consideration and respect. But what we have chiefly to contend against are the numerous and weighty outside influences

which combine together so far as lies in their power to bar all progress, to crush scientific investigation and research, and to wreck every measure which the medical profession as a body, with but few exceptions, demand as essential for the prevention and extermination of some of the most grave and terrible diseases which afflict the human race. Many of our most bitter opponents occupy high social positions and they may be, so far as I know, in their own spheres well-informed and clever people. They may even have acquired a smattering of physiology, or dabbled in medical works, and the vague and superficial knowledge they have thus obtained makes them conceited enough to imagine that they are thoroughly qualified to give a dogmatic opinion upon every conceivable subject relating to health and disease, as they are indeed quite prepared to take charge of the affairs of the world in general. But the great mass of opposition which we have to face consists in a combination, in various forms and degrees, of unreasoning prejudice, personal interests which brook no interference, sheer faddism or fanaticism, misguided sentiment, downright ignorance, and consummate impudence and conceit. When any of these obstructive forces are associated with power for active mischief, be it but that of a chairman of a board of guardians, the results are very likely to be most injurious or even disastrous to the cause of humanity. I repeat, therefore, that in face of these embarrassments we must be ever wary and careful as to our sayings and doings, avoiding everything that can rouse needless opposition or excessive friction, and giving no occasion for those whom we are compelled by their conduct to regard as our enemies to gain any advantage over us or to cast ridicule upon our claims.

In bringing this address to a close may I be permitted to refer briefly and comprehensively to what I conceive to be the real objects which such an authoritative and august gathering as an International Medical Congress should have in view and what practical purposes it is intended to serve? Surely it must never be regarded as a mere passing event which leaves behind no permanent impression or result. In general terms a congress of this nature may be described as intended to promote those aims which we as a profession individually and collectively always keep steadily before us, notwithstanding our differences of method and in spite of all opposition and difficulties, and by mutual instruction, help, and encouragement to render each one of us better fitted to carry out efficiently and intelligently the high functions and noble duties of our calling. And what are they? First and foremost comes the formidable task of diminishing mortality, of preserving and saving life, and prolonging its duration, so far as this purpose is consistent with the fitness of things. As a matter of fact, we instinctively do our utmost under every possible circumstance to avert death, and there is no more sad or trying ordeal for the practitioner of medicine to pass through than to see a young and promising life, or one in the full prime and vigour of manhood, engaged not uncommonly in active and useful work, and, alas, but too often the family "bread-winner," cut off by some dire disease which defies his best skill and most devoted efforts. Our surgical colleagues have a great advantage over us poor physicians in this matter and I frequently envy them when I think of the thrill of satisfaction and pleasure which the skilful operator must feel, especially at the present day, when he calls to mind the lives he has personally saved. But the mere addition of two or three years to the average duration of existence, or the prolongation of the life of one bowed down by the ravages of time or with constant pain and suffering, does not appeal to me as the supreme duty of the medical profession and I have no sympathy with some of the ideas now in vogue with regard to the attainment of longevity. I hold in my hand a summary of instructions as to how to live to be a hundred! I wonder who wants to spend a hundred years in this weary world, unless it be that conscience makes him afraid of venturing on the next! Other prominent objects which as a profession we are always striving to fulfil are the cure of particular diseases; their prevention, both among individuals and communities; and their extermination so far as this is practicable. Then I need but mention the wide field that is open before us and the constant call that is made upon our knowledge and skill in our attempts to relieve pain and suffering of every kind. But I venture to think that perhaps the most difficult problem with which we have to cope at the close of this nineteenth century, and one worthy of our supremest efforts, is how to deal with the mass of "morbidity" and "invalidism," the countless "ailments," real or imaginary, call them by what name you like, which crowd upon us on all hands and in every station of life, which render thousands upon thousands unequal to the ordinary avocations and duties of modern existence, which wreck the comfort and happiness of many a home, and which often become the starting point of pernicious habits that are sapping the very foundations of society in many directions, and if not checked must inevitably lead to widespread disaster.

What will be the ultimate practical outcome of the occasion which I have utilised as a text for my address cannot as yet be determined. We may reasonably hope that it has had some influence in creating a kindly and mutually considerate international feeling at a period in the world's history which is fraught with grave issues. Surely, moreover, it cannot fail to leave its mark upon the history of the progress of medicine and surgery and to promote in no small measure the all-important objects to which I have just referred. At the present moment we cannot shut our eyes to the disquieting fact that the relations between Russia and Great Britain are such as to cause serious anxiety with regard to the course of events even in the immediate future. We must all earnestly hope, however, that diplomatic statesmanship, aided by mutual consideration and a conciliatory spirit, may be able to guide us safely and successfully through all dangers and difficulties, so that "peace with honour" may continue between these two great empires. Their power for good upon vast masses of people, when acting in concert, it is impossible to over-estimate; while the beneficial results which may be anticipated from their combined efforts in the cause of civilisation and human progress are incalculable. On the other hand, the bare suggestion of war calls up scenes of horror, devastation, and desolation, with inevitable disastrous consequences to both nations, from which even the most hardened and thoughtless must instinctively shrink. Whatever may be the immediate and final results, international and professional, of this memorable cosmopolitan gathering, and whatever may happen in the future, I believe I am expressing the feelings and sentiments of my fellow-countrymen who were present and took part in its proceedings when I affirm that while time will dim more and more any passing impression of experiences not altogether agreeable which may have occurred to us as individuals until they are absolutely forgotten, there will always remain a vivid mental picture of novel, attractive, and interesting scenes, as well as of manifestations of kindly feeling and generous hospitality, and we shall one and all ever entertain a grateful and pleasant reminiscence of the Moscow Congress.

THE VIRUS OF VACCINIA AND ITS CULTIVATION.

BY A. F. STANLEY KENT, M.A. OXON.

THE identification and culture of the virus of vaccinia has for many years proved a problem of such difficulty as to baffle the endeavours of some of the most brilliant workers in bacteriology. Perhaps this is in some measure owing to the fact that the methods of bacteriology have been employed almost to the exclusion of histology, the idea that histological methods could afford any assistance having occurred apparently to very few. Nevertheless, that all experiments having for their starting point the collection of lymph from the vaccine vesicle would have to contend with the presence of multitudes of extraneous organisms will be evident to anyone who is conversant with the flora of the skin. It is indeed a matter of common knowledge that micrococci of various species—especially the staphylococcus pyogenes albus and staphylococcus pyogenes aureus—besides being present in large numbers on the surface and in the dead superficial cells of the stratum corneum, swarm in the openings of the hair follicles and even penetrate in them to a considerable depth.

It is for this reason that there arises so extreme a difficulty in sterilising the skin of patients about to undergo surgical operations, and when the object is to obtain lymph from vesicles in the skin itself and to obtain it free from extraneous organisms it is apparent that the task is one

calling for the exercise of the utmost care. All attempts to identify the virus by ordinary bacteriological means having failed I proposed to investigate the problem by somewhat different methods. It seemed probable that whatever organisms there might be in the vaccine lymph, at all events in the tissues around the vesicle, one might reasonably hope to find the specific virus in a state of comparative purity. Accordingly I undertook the preparation and examination of a large number of sections of the vaccine vesicle and its surrounding tissues. The preparations were made by vaccinating a susceptible animal in a suitable manner, excising the resulting vesicles at stages of their growth varying from a few hours after inoculation to their latest development, fixing and hardening these specimens by the best methods known to me, and, finally, after sectioning them, subjecting them to several different methods of staining. At the same time lymph was collected of different ages and examined bacteriologically. Some short account of the results obtained was communicated to the meeting of the British Medical Association at Bristol in 1894.

Of the extraneous organisms found it is necessary to say very little. Of course, upon the free surface of the sections, and especially in the openings of the hair follicles, there appeared crowds of micrococci. They were very obvious, occurred in clumps and masses of all sizes, and were as easily stained as is usually the case. They occupied not only the surface of the skin but extended also a considerable distance into the hair follicles, occurring as clumps of varying size and in the deeper parts as groups of two, three, or more. In the tissues immediately bordering on the breach of continuity in the skin small numbers of these organisms may sometimes be seen. In the deeper tissues, however—i.e., a short distance from the actual breach in the surface—they are conspicuous by their absence.

Whilst asserting the absence of the extraneous organisms I am far from denying the presence of other organisms in the tissues surrounding the vaccine vesicle—indeed, the exact contrary is the case—and I attach much importance to the fact, which I first pointed out in 1894, that there do exist organisms both in the vesicle and also in the surrounding tissues for a considerable distance from the site of the original lesion—organisms which in their morphological characters, their distribution in the tissues, their relation to cells, and their staining reactions are separated sharply off from the other organisms ordinarily associated with the processes of vaccinia. Morphologically they may be described as small—indeed, exceedingly minute—bacilli, about 1 micron in length and rather less than a half of this in thickness, with rounded ends, and usually occurring in pairs forming diplo-bacilli or dumb-bells. Photographs of these organisms were shown at the Bristol meeting of the British Medical Association in 1894. Morphologically, then, they appear to resemble the minute bacilli described by Klein, and independently by Copeman and myself, as occurring in early vaccine lymph, and I take it that the occurrence of these organisms also in the tissues under circumstances immediately to be described lends some probability to the view that they are fundamentally concerned in the causation of the disease. The distribution of these organisms in the tissues is a point of great importance. Unlike the extraneous organisms, they are not present in countless multitudes at the surface of the skin and in the hair follicles. Indeed, as has been shown previously, they are absent from, or present in small numbers only in, lymph taken from vesicles after the fourth or fifth day from inoculation, whilst the extraneous organisms seem actually to increase in number as time goes on.

On the other hand, the bacillus, which for convenience it may be well to call simply "diplo-bacillus vaccinæ," is present in the tissues surrounding the vaccine vesicle, not only soon after inoculation, but even up to the twelfth or fourteenth day and probably even later. It is of interest to note that it does not occur in the tissues as colonies or irregular masses, but is for the most part contained in cells. These cells appear often to be wandering cells; some, however, are of the nature of fixed corpuscles. As stated above the presence of these organisms in the tissues surrounding the vaccine vesicle may be recognised in specimens taken at all stages of the disease up to about the fourteenth day and the number does not seem to be materially lessened in preparations made at the later dates. Their presence is the more significant when it is remembered that they are present in what is practically a pure culture, for the extraneous organisms, though numerous on the surface, are absent from the deeper tissues affected by the diplo-bacillus vaccinæ. The staining reactions of this bacillus are also of interest inasmuch as they afford some explanation of the extreme difficulty encountered in demonstrating its presence. For to stain the bacillus at all was found difficult and this difficulty has undoubtedly stood in the way of its earlier recognition. Most of the ordinary aniline dyes are unsatisfactory for the purpose and it was only by following out a somewhat complicated modification of Gram's method that I was able to stain it with certainty in the tissues. However, that the method is satisfactory is, I think, proved by the photographs which were shown at Bristol in 1894 and by preparations that were there exhibited.

I consider, then, that the morphological characters, the distribution in the tissues, the relation to cells and the staining reactions, together with the fact that cultures containing this organism produce in the calf and in children typical vaccine vesicles—vesicles which in their turn contain the same virus—sharply separate this diplo-bacillus off from the other so-called extraneous organisms and give support to the view that here at last we have before us the true germ of vaccinia. There are additional considerations which lead to the same conclusion. As will be remembered, a statement has been made that the peculiar minute bacilli described as occurring in early lymph are absent or nearly absent from lymph taken at a later date. In connexion with this it is significant that both Klein and I[1] have described in these organisms bodies which have the appearance of spores and have noticed the possible explanation by this circumstance of the permanence of vaccine lymph when preserved dry upon points. It is further to be noted that although the bacilli appear to be absent, or nearly absent, from mature lymph this is by no means the case with the tissues, the bacilli being recognisable in these until quite a late stage of the disease.

It is of course quite possible that the different conditions obtaining in the two situations are sufficient to determine on the one hand the formation of spores with subsequent or simultaneous breaking up of the bacilli and on the other a persistence of the ordinary form. Nevertheless, it appeared to me to be probable that in the case of lymph stored in contact with glycerine some development of the spores, supposing such to exist, might reasonably be looked for and this appeared the more probable from the fact, observed by many, of the great extent to which it is possible to dilute lymph with glycerine without injuring its power, and still more from the statement that lymph when so diluted and stored actually increases in virulence. I have accordingly examined a number of samples of glycerinated calf vaccine lymph and by the special methods of staining above alluded to I have been able to satisfy myself that whatever may be the case with late and mature lymph, in glycerinated lymph which has been kept for a few weeks the diplo-bacillus vaccinæ is undoubtedly present. One explanation may, of course, be that in addition to the lymph itself a certain quantity of vesicle pulp would be used in the preparation of the glycerinated lymph and the bacilli may have come from this, but in most of the samples examined the solid material taken was reduced to a minimum and therefore this source of error was much lessened.

Another thing which tends to strengthen belief in the specific nature of the diplo-bacillus is the fact that, as briefly noted in a joint communication by Dr. Copeman and myself to the Bristol meeting of the British Medical Association in 1894 and more fully described by Dr. Copeman in the following year in London, a method was devised whereby it was found possible to cultivate an organism morphologically identical with the above and to produce by the inoculation of such cultures upon calves vesicles which very closely resembled those of ordinary vaccinia. And, further, I have shown that in vesicles produced by inoculation of cultures the same organism exists and has the same relative distribution as regards cells and extraneous organisms as I have described as characteristic of the diplo-bacillus vaccinæ.

It was, however, very desirable that in addition to the cultures made in eggs other media of a more convenient character and capable of being solidified should be devised. I had already made very numerous experiments with all the ordinary culture media and with modifications of these without attaining any satisfactory result. Early in 1895, however, I was more fortunate and at the meeting of the British Medical Association held in London in that year I was able to report that some measure of success had been obtained.

[1] Brit. Med. Jour., Sept. 22nd, 1894.

My experiments were conducted upon the supposition that it should be possible to prepare some special mixture of albumen and glycerine so proportioned that whilst the former would afford nourishment and encourage the growth of the vaccine virus the latter would prevent the growth of extraneous organisms and so do away with the necessity of sterilisation by heat.

The following is a typical experiment copied from my notebook: "April 18th, 1895: Lymph was collected from the calf at the National Vaccine Establishment in Lamb's Conduit-street. It was inoculated upon a culture medium consisting of egg albumen with the addition of 10 per cent. of pure glycerine and incubated at 37° C." Five days after inoculation I have a note to the effect that there are many white colonies floating in the fluid, together with a growth which I compared with cotton wool. This cotton-wool-like growth I believe, for reasons which I shall presently set forth, to be the vegetative form of the diplo-bacillus vaccinæ. At the same time that the above cultures were made I also inoculated with vaccine lymph tubes of the same culture medium which had been solidified by heat. The note here is that colonies, orange and yellow, are present. There was also upon the surface of the culture medium a thin film-like growth which I took to be the expression on the solid medium of the formation of the cotton-wool-like growth in the liquid. The coloured colonies consisted of staphylococci. Experiments were also carried out with media containing 15 per cent. of glycerine, and in these the liquid tubes showed fewer of the white colonies but more luxuriant cotton-wool-like growth, and on the solid form the orange colonies were usually absent whilst the filmy growth was more pronounced. Finally, when the medium was made up with 20 per cent. or more of glycerine, the liquid tubes showed no colonies whilst the cotton-wool-like growth was well marked. These results were briefly alluded to at the meeting of the British Medical Association held in London in 1895.

On first observing the above-described cotton-wool-like appearance in the culture tubes I was of opinion that it represented a slow and incomplete coagulation or precipitation of a portion of the albumen contained in the medium, such precipitation being due probably partly to the action of the glycerine and partly to the dilution combined with the incubation at 37° C. As is well known, egg albumen is a complex mixture and contains several proteids which coagulate at different temperatures; moreover, the exact temperature at which coagulation takes place is determined by the concentration of the solution and the quantity of salts present. The coagulation temperature is generally given as from 70° to 73° C., but Gautier states[2] that coagula may also be obtained at 54° and 63°, whilst according to Corin and Berard,[3] by applying the method of fractional heat coagulation to filtered white of egg, coagula may be obtained at 57·5°, 67°, 72°, 76°, and 82°, the first two being due to globulins, the others to albumins. It seemed probable, then, that by mixing egg albumen with glycerine and subjecting it to incubation some amount of precipitation of proteid might be produced and this was rendered more likely by the experiments of W. Ramsden, who showed that by a prolonged action of heat a precipitation of albuminous fluids might be brought about at a temperature considerably below that generally assigned as specific for the body under consideration.

Accordingly I made numerous control experiments by mixing with egg albumen varying quantities of glycerine and submitting the resulting mixtures to similar conditions of incubation as obtained in the case of the culture tubes. Treated in this way it was found that in the case of tubes containing an addition of 33 per cent. of glycerine after a short time a certain amount of a woolly material appeared as clumps and cloudy patches in the fluid. It appeared, however, to consist of a definite solid substance suspended in a bright and transparent liquid and no general opalescence or cloudiness of the fluid was produced. In the case of cultures, on the other hand, the solid portion was much more finely divided and produced a definite opalescence in the liquid. Larger flakes of a peculiar semi-transparent character were also present, and at the upper edge of the fluid there was often observed a film-like portion of growth. In tubes containing a less proportionate amount of glycerine—viz., about 16 per cent.—and in which the albumen was about 33 per cent., a greater degree of opalescence was produced, but no increase in the cloudiness was observed to occur after the first few days, whilst in the case of similar tubes inoculated with vaccinia the opalescence was much greater, continued to increase and was accompanied by the formation of a flaky semi-transparent material, especially at the upper part of the tube where the fluid was in contact with air. In solid media it is of course less easy to make out the exact characters of the growth, in consequence of the physical condition of the nutrient material. It is, however, possible to ascertain that in its general characters the growth corresponds to the film-like material seen at the upper part of tubes containing liquid culture material.

Having thus succeeded in obtaining a growth in special culture media inoculated with vaccine lymph I next experimented with similar media inoculated with lymph which by admixture with glycerine and subsequent storage had been freed from extraneous organisms. These experiments gave results indistinguishable from those above described, with the exception that in no case did coloured colonies appear. Moreover, when cover glass preparations had been made and appropriately stained microscopical examination revealed in every case the presence of groups of organisms morphologically indistinguishable from that above described as diplo-bacillus vaccinæ. Further, in the majority of the experiments they were the only organisms present, but in a few cases they were accompanied by extraneous germs. These cultures have been used for the inoculation of calves and have given results which tend to support the view of the specific nature of the bacillus.

It may perhaps be suggested that the finding of the organisms in the cultures is no proof of their multiplication in the artificial medium, since the individuals observed microscopically may have been some of those present in the original lymph used for establishing the culture. In answer to this objection I need only say that the cultures have been carried on from tube to tube and also the quantity of lymph used in the first inoculation was only $\frac{1}{10,000}$th of the quantity of fluid with which it was mixed. So that although in the tubes of the first generation cover-glass preparations might conceivably reveal the presence of an occasional bacillus, the occurrence of numerous groups would be most unlikely and would approach impossibility in the case of subsequent tube-generations had no multiplication taken place meanwhile. As mentioned previously, in a communication to the British Medical Association in 1894 it was stated that cultures of an organism morphologically indistinguishable from the above, but obtained from variolous crusts, when inoculated upon calves produced phenomena which up to the fourth day were similar to those produced by normal lymph, whilst in 1895 Dr. Copeman communicated to the association the further fact that by passing such cultures through two successive calves a lymph was obtained which produced typical vaccinia in a child. The cultures with which these results were obtained were fully described by Dr. Copeman in 1895. The medium used was the hen's egg, the yelk and white being well mixed together and subsequently inoculated with variolous material. Certain disadvantages were found to result from the use of such nutrient material. Transparency was lacking, subcultures failed, and isolation of special organisms by plate cultivations was not practicable. It was whilst endeavouring to improve upon these early attempts that I hit upon the plan of using the egg-white apart from the yelk and mixed with sufficient glycerine to inhibit the growth of extraneous organisms.

The result has been so far successful that I am now able to place the diplo-bacillus vaccinæ under circumstances such that its multiplication is apparently possible, and to prepare cultures containing it in a pure state.

James-street, Hyde Park, W.

[2] Chimie appliquée à la Physiologie, &c., Tome i. (1874), p. 242.
[3] Travaux du Laboratoire de Léon Frédéricq, Liége, Tome ii. (1888), p. 170.

CROWNHILL (DEVONSHIRE) CONVALESCENT HOME.—The annual meeting of this institution was held on April 30th. The report showed that 265 patients had been admitted during 1897. The financial statement exhibited a balance in hand of £28. The report mentioned that the home, which is beautifully situated on the border of Dartmoor, is capable of accommodating 500 patients during the year, but the subscription list is not large enough to permit of this number being received.

NOTE ON THE SERUM REACTION OF MEDITERRANEAN FEVER AND ITS TREATMENT BY ANTITOXIC PLASMA.

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THE cases were all examined by the microscopic method. Some of them were also tested in the sedimentation tubes recommended by Professor Wright, but the larger quantity of blood and longer time required for this method seemed to make the former preferable. The blood was collected in capillary tubes, which were sealed and allowed to stand for 24 hours. The tube was then broken, the clot drawn out, and the serum transferred to a slide. In this way the serum obtained was not entirely free from blood corpuscles, but these did not appear to interfere in any way with the reaction. This serum was diluted with "loopfuls" of normal saline solution to the required amount, and a small quantity of a cultivation of the micrococcus Melitensis of Bruce mixed with it by means of a platinum loop. In all about 30 cases were examined, but, unfortunately, as the samples of blood were sent from various parts of the island of Malta, detailed notes were not kept of all.

TABLE I.—*Cases of Fever which showed the Reaction.*

No.	Day of disease.	Dilution of serum.	Reaction.	Remarks.
1	35th day.	1-10	Immediate; no reaction with Eberth's bacillus.	Died; ulceration of large intestine.
2	26th day.	1-10 and 1-25	Immediate.	Lasted 9 weeks; antitoxin.
3	3rd day.	1-10	None.	Antitoxin on 9th day; lasted 11 days.
	8th day.	1-10	Immediate.	
4	4th day.	1-10	None.	Antitoxin on 4th and 14th days; lasted 24 days.
	9th day.	1-10	In half an hour.	
	6th week.	1-10 and 1-100	Immediate. In half an hour.	Very severe constitutional symptoms; lasted over 3 months; antitoxin.
6	16th day.	1-10	Immediate.	Severe; with lung complications; lasted over 4 months; antitoxin.
7	10th week.	1-10	Immediate.	Prolonged; uncomplicated except with "rheumatic" pains.
8	3rd week.	1-10	Immediate; no reaction with Eberth's bacillus.	Resembled enteric fever at first.
9	5th week.	1-10	Immediate.	—
10	5th week.	1-10	Immediate.	—
11	9th day.	1-10	Immediate; no reaction with Eberth's bacillus.	Resembled enteric fever at first.
12	15th day.	1-10	—	—
13	12th week.	1-10 and 1-100	Almost immediate. None.	—
14	5th day.	1-10	Immediate.	—
		1-100	In half hour.	
		1-500	None.	

TABLE II.—*Cases of Slight Fever which did not show the Reaction.*

No.	Day of disease.	Dilution.	Reaction.	Remarks.
1	4th	1—10	None.	Fever lasted 9 days; no relapse.
	13th	1—10	None.	
2	4th	1—10	None.	Fever lasted 6 days; no relapse.
3	8th	1—10	None.	Fever lasted 9 days; no relapse.
4	5th	1—10	None.	Fever lasted 7 days; no relapse.
	7th	1—10	None.	

FIG. 1.

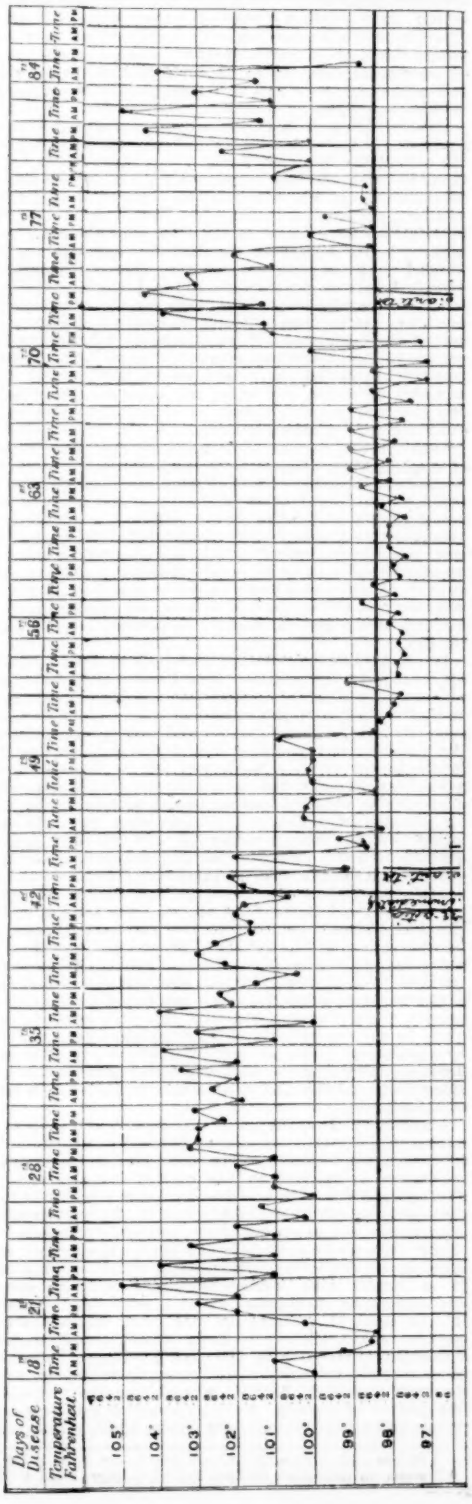

Chart in illustration of the course of temperature in Case 3.

In every case which could be considered clinically typical of Mediterranean fever a reaction was obtained. There remained a certain number of cases of uncomplicated fever lasting from six to ten days, not at all uncommon in Malta, which did not give the reaction at any time during their course or after the fever had subsided. Four cases of enteric fever were also tested with negative results, but gave a reaction with the bacillus typhosus. The course of the disease confirmed these results and in two of them post-mortem appearances also. Three cases during part of their course closely resembled enteric fever. Two of these were, in fact, so diagnosed at first, but no clumping was obtained with the bacillus typhosus, whereas the reaction with the micrococcus Melitensis was immediate, and in each case the after history left no doubt as to its nature; in two the usual relapses and "rheumatic" pains recurred for several weeks, and in the third a necropsy confirmed the diagnosis.

As regards the date at which the reaction first appears the number of cases examined during the first week has been very few. The fifth day was the earliest on which it was obtained and in no case which ultimately showed the reaction was it found absent after this. The cases were at first all tested with a dilution of 1–10 and the reaction in almost every case occurred immediately—that is, the micrococci were found clumped when the slide was put under the microscope, though a few could often be seen free; in from a quarter to half an hour these, too, were clumped. The reaction was also well marked in greater dilutions up to 1–100, though with such a rather longer time was generally required up to half an hour. If a considerable quantity of the micrococci be added in putting up the specimen the clumping can be recognised with the naked eye.

Five cases were treated with the antitoxic plasma prepared by Professor Wright of Netley. Of these 2 cases which were in their sixth and ninth week of disease did not appear to be affected in any way by the injection. The third case was a very severe one with great prostration, in which the fever had lasted seven weeks with only one partial remission; 30 c.c. of the antitoxin were injected and a marked improvement commenced from the following day. The tongue, which had been dry and brown, and the breath, which had been very fœtid, improved very markedly; the collapse became less, and the temperature came down and remained normal from the eighth day after the injection (see Fig. 1). Another relapse occurred after three weeks and the temperature again decreased three days after another injection of 15 c.c. of the antitoxin, but this improvement was not maintained and no more of the antitoxin was available.

The two other cases were recent ones and uncomplicated. In Case 4 30 c.c. of antitoxin were injected on the fifth day. The temperature, which had reached 106°, gradually fell till it ranged between normal and 101°; but on the fourteenth day, as it showed a tendency to rise again, another similar dose was given and was followed again by a fall of temperature,

FIG. 2.

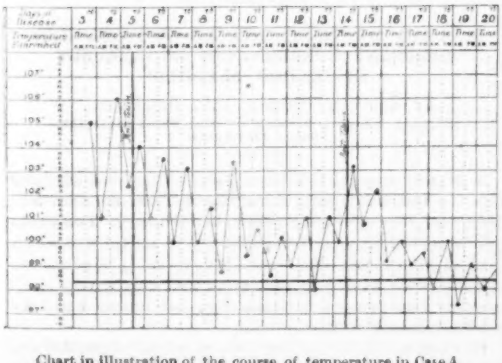

Chart in illustration of the course of temperature in Case 4. After the twentieth day the temperature remained practically normal.

which did not rise above 100° from the third day afterwards (see Fig. 2). This case did not show the serum reaction on the fourth day, but did so on the ninth, which, however, was after the first injection of antitoxin.

In Case 5 no serum reaction showed on the fourth day, but it did so on the eighth day. On the ninth day 30 c.c. of antitoxin were injected and the temperature, which had already shown a tendency to come down but continued between 100° and 102°, reached and remained normal from the third day after the injection.

The recorded temperatures in Case 5 were as follows, two observations being taken each day, the first in the morning and the second in the evening:—Third day of the disease, 105·0° F. and 101·0°; fourth, 103·0° and 103·0°; fifth, 102·4° and 103·0°; sixth, 101·4° and 102·4°; seventh, 100·4° and 102·2°; eighth, 100·2° and 102·0°; ninth, 100·0° and 102·6° (antitoxin was injected); tenth, 100·0° and 101·2°; eleventh, 100·4° and 99·4°; twelfth, 98·4° and 99·0°; thirteenth, 98·2° and 99·0°; fourteenth, 98·0° and 97·6°; fifteenth, 97·8° and 98·4; and sixteenth, 97·6° and 98·4°.

In coming to any conclusion as to the benefit resulting from the antitoxic serum a great difficulty lies in the fact that whereas from analogy with the use of similar serums in diphtheria and tetanus and also experimental inoculations the best results are to be expected in recent cases, yet diagnosis during the first week is very difficult, for besides enteric and other causes of fever there is a form of slight fever, already referred to, common in Malta. This lasts from about six to ten days and is apparently different from Mediterranean fever but only distinguishable from it by its short duration and by the serum test. Now this test does not seem to occur until the end of the first week and is itself of no value after the injection of antitoxin, which presumably will produce the reaction in the blood.

The cultivations used in these experiments were from Dr. T. Zammit's laboratory, with whose assistance much of the work was carried out.

Malta.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

A CASE OF DEPRESSED FRACTURE OF THE SKULL.

BY CLAYTON A. LANE, M.D. LOND.,
SURGEON-LIEUTENANT, INDIAN MEDICAL SERVICE.

ABOUT noon on Aug. 17th, 1897, while the 18th Bengal Lancers were encamped at Kushalgarh on their way to Kohat, a sowar was kicked on the head by his horse and was brought to the hospital tent. He was insensible, answering no questions. His pulse was irregular and very easily compressible; his pupils were neither contracted nor dilated and were equal. Crossing the centre of the left eyebrow and running upwards and inwards for an inch was a wound leading down to the periosteum. Above and inside the upper end of this wound a depression could be seen and felt through the skin and on putting a finger into the wound a fracture was felt starting near the middle of the upper edge of the orbit and curving upwards and finally outwards across the temporal ridge, where it was lost. The curve had a radius of about an inch and the portion of bone in its concavity was depressed, the greatest depression being along the line of fracture, where it amounted to ¼ in. The man's condition seemed to me to be so critical as not to justify my waiting to operate till water could be boiled and cooled, though the water I should have to use came from a dirty tank near the camp. Accordingly I began the operation at once, using carbolised water (1 in 40) for lotion and using the instruments provided in the field surgical pannier. On starting to enlarge the wound upwards the patient began to struggle, so the hospital assistant gave him chloroform. After trephining and inserting the elevator the depressed bone sprang at once into position and remained there. The bleeding vessels were twisted, not tied, and the skin was sewn up with silver wire without any drain. During the operation he stopped breathing, the pulse being still felt at the wrist, but after artificial respiration had been continued for some minutes he began to breathe again. With the thermometer at over 100° F. in the shade the cessation of artificial respiration was an even greater pleasure than usual. 20 minims of spirit of ether were injected after

the operation and he shortly revived. In the evening his temperature was normal and his pulse was 100. The patient was sensible and had no pain.

The question of after-treatment was a most anxious one as the regiment was to march next day, but after grave consideration I determined to have the patient carried with us on the two marches to Kohat, 30 miles in all, for at that time the chances of his obtaining efficient medical aid at Kushalgarh were more than remote. He was carried in a doolie by Kabars, starting at 4.30 A.M. each day and getting into camp before the heat from the sun was great. On the evening of Aug. 18th his temperature was 100° F. but the wound looked perfectly healthy. On the 19th his temperature was normal and he was quite free from any pain. I left him at Kohat and subsequently heard from Surgeon-Captain Bamfield that he never had a bad symptom. He rejoined the regiment about six weeks later. In February last, six months after the operation, the patient told me that he had been quite well since he rejoined the regiment and had had no headache. He had been doing his duty satisfactorily and had not been ailing in any way. There was a slight scar 1½ in. in length above his left eyebrow and on the site of the fracture was a prominence giving the impression that the previously depressed bone had been too much elevated. Where the bit of bone had been removed there was a slight depression and its area, too, was small.

The fact that the wound remained aseptic was probably due to the following reasons, at least in part. So far as the water went either the carbolic acid was effectual in sterilising it sufficiently to enable the leucocytes to do their work easily or the micro-organisms it must have contained were not pathogenic, or if they were so they were not educated to virulence. The silk supplied in the field equipment is not kept in an antiseptic solution and cannot be kept surgically clean, and I do not believe that silk can be sterilised by a few minutes' soaking in carbolic solution. I accordingly avoided it, twisting all vessels. Before using the silver wire for suturing I rubbed it thoroughly with a clean cloth, hoping that in this way I might be able to get it almost surgically clean, just as one can clean the outside of a catheter. The measures used to cleanse it were probably effectual for no stitch-abscess resulted.

The case seems to show with particular force the well-known fact that when in the field and away from a contaminated hospital building (as all hospital buildings tend to become) operations can be successfully performed without all the precautions necessary in a fixed hospital; and though that, of course, is no cause for not taking every precaution which can be taken, still it shows that under these circumstances the risk of septic infection is less than it appears to be, and that it is justifiable, if not an actual duty, to make an attempt to save life even though the surroundings may appear far from favourable.

Jullunder.

RUPTURE OF GALL-BLADDER; LAPAROTOMY TWENTY-FOUR DAYS AFTER INJURY; RECOVERY.

BY J. M. H. MARTIN, M.D. VICT., F.R.C.S. ENG.,
SENIOR HONORARY SURGEON TO THE BLACKBURN AND EAST LANCASHIRE INFIRMARY.

IN THE LANCET of March 12th, 1898, Mr. Whipple records a case of cyst in connexion with the liver apparently due to the rupture of a hepatic duct. In the following case the bile escaped into the peritoneal cavity from a ruptured gall-bladder. Such an injury is generally considered fatal, but, as this case shows, not necessarily so.

A boy, aged nine years, was admitted to the Blackburn and East Lancashire Infirmary on Nov. 26th, 1897. Four days before admission his abdomen had been run over by a cart weighing 15 cwt. After the injury he was carried, or rather dragged, a quarter of a mile to his home. The medical man who then saw him reported that "he was suffering from shock and pain in the right side of the belly not specially confined to the liver." Next day his symptoms were distinct abdominal swelling, slight discolouration over the region of the gall-bladder, and a temperature of 101° F.; there was no vomiting. On the 24th there was retention of urine and his "bowels were moved, the motion giving marked evidence of blood." On admission to the infirmary the boy looked very ill and complained of pain in the abdomen, which was slightly distended but not very tender to the touch. Nothing else was made out by physical examination of the abdomen. His pulse was 100 and his temperature was 98°. His tongue was furred; there was no sickness. Nothing in the way of local treatment seemed indicated and milk with lime-water was the only food given. At 10 P.M. the temperature rose to 101·8°. Once during the afternoon there was vomiting of curdled milk. Next morning the abdominal tenderness had almost disappeared and the boy looked much better. He complained of being hungry. From this time till Dec. 2nd (six days), when he was sent home, improvement was very rapid; in fact, two days before discharge he was found running about the ward during the nurse's absence for a short time. He was discharged as being "well" and was taken home to Accrington by an uncle who carried him most of the way. The uncle states that in the train the boy complained of feeling ill and when he was seen the same evening by his former medical attendant he was "complaining of pain in the abdomen and vomiting bilious fluid." The abdomen had become distended again. He remained at home for twenty-one days and during this time the stools were clay-coloured. He was sick occasionally during this time and the abdomen remained swollen. On admission to the infirmary for the second time a great change was evident in the boy. He had lost a great deal of flesh; the abdomen was full of fluid of some kind but was not tender. The temperature was 98° and the pulse was 110. The tongue was furred; there was no jaundice, neither was bile present in the urine; the stools were clay-coloured. The temperature remained normal during the second twenty-four hours after admission. On the third day the abdomen was opened in the middle line above the umbilicus by an incision 2 in. long. Nearly five pints of fluid escaped. This fluid, which was deeply bile-stained, was in the general peritoneal cavity and not in any way limited by adhesions. The coils of intestine in the neighbourhood of the liver were matted together with lymph. The gall-bladder was empty and was thought on digital exploration to be adherent to the parietal peritoneum. A drainage-tube was left in the wound and a bulky dressing was applied. The boy bore the operation well and there was no rise of temperature afterwards. The dressing was removed on the second day and found to be soaked with bile-stained fluid. The boy's general condition had improved, his tongue being moist and his pulse better. The after-history is only remarkable for the rapidity of recovery. The temperature never reached 100°, the discharge became less each day, and the tube was discontinued on the seventh day. The total quantity of fluid absorbed by the dressing would almost equal the first amount removed. Bile was noticed for the first time in the fæces on the third day after the operation. The urine was examined each day for bile but it was never detected. The daily average quantity of urine was only 20 oz. The patient was discharged on Jan. 1st, 1898, and when seen on March 21st was quite well.

Blackburn.

A CASE OF INCARCERATED RETROFLEXED PREGNANT UTERUS WITH ENORMOUSLY DISTENDED BLADDER.

BY WILLIAM SIMPSON, M.B., B.S. DURH.,
RESIDENT MEDICAL OFFICER OF THE UNION HOSPITAL, NEWCASTLE-ON-TYNE.

A SINGLE woman, thirty-two years of age, was admitted into the Union Hospital, Newcastle-on-Tyne, on April 5th, 1898, complaining of great pain in her abdomen. Two weeks previously she began to have difficulty of micturition which gradually increased. For three days previously to admission she had been unable to pass urine and only a very small quantity had escaped involuntarily; her bowels had been confined since April 1st.

On examination the abdomen was very much distended and tense and a swelling, which was dull on percussion and on first consideration appeared like a large ovarian cyst, extended from the pubes to 2 in. above the umbilicus. Both legs and the vulva were œdematous. On vaginal examination the fundus of the uterus was felt to be enlarged; it occupied Douglas's pouch and the cervix was felt to be

directed forwards above the pubes. The patient said that she had not menstruated for the last three months. A soft rubber catheter was passed into the bladder and 196 oz. of foul-smelling, high-coloured urine were drawn off, the last few ounces of which were loaded with pus. In addition fully 4 oz. escaped during examination. No effort was made to replace the uterus that day on account of the collapsed state of the patient. On April 6th she passed 43 oz. of urine naturally, 77 oz. were drawn off by the catheter, and on vaginal examination the uterus was found to have righted itself. On the 7th 72 oz. of urine were passed naturally and 14 oz. by the catheter, after which she was able to empty her bladder voluntarily and the quantities passed on the three succeeding days were 70 oz., 80 oz., and 90 oz. respectively. She was discharged on April 20th in good health, the fundus of the uterus extending to 2 in. below the umbilicus. The œdema of the legs and vulva had completely disappeared.

The quantities of urine above stated are strictly accurate, they having been measured under my personal supervision. I should like to know what has been the largest quantity of urine known to have been drawn off from the female bladder.

I am indebted to Mr. Dodd, visiting surgeon to the hospital, for permission to publish this case.

Newcastle-on-Tyne.

NOTE OF A CASE OF LIPOMA OF THE HAND.

By ARCHIBALD CUFF, B.A., B.C. CANTAB., F.R.C.S. ENG.

THE presence of a fatty tumour in the palm of the hand, though more frequently met with there than in the sole of the foot, is of uncommon occurrence. The following case was recently under my care in the Sheffield Royal Infirmary.

The patient, a woman, aged forty-four years, had had the tumour, which had slowly increased in size, for eight years. The inconveniences caused by its position and size rather than any feeling of discomfort were her reasons for having it removed. The tumour occupied the position of the thenar eminence, reaching above to the level of the base of the first metacarpal and below projecting between the thumb and index finger. From the dorsum of the hand it was seen to project between the heads of the thumb and index metacarpal bones, pushing them apart. Irregular and lobulated in outline, the mass gave an indefinite sense of fluctuation on palpation. Its position not lying in the direct course of the tendon sheath, the way in which it was inserting itself between the metacarpal bones, and, lastly, the negative result on pushing an exploring needle into the mass, distinguished it from a cyst in connexion with the tendons, with which these tumours are most likely to be confounded. It was removed by an incision made over its long axis through which it shelled out easily. It then appeared to be of greater size than was suspected before operation, several lobules being situated beneath the palmar fascia extending to about the mid line. Very little bleeding was met with and it was noticeable after removal of the tumour that there was no fatty connective tissue to be seen in the wound. I am indebted to Mr. Shaw, surgeon to this institution, for permission to treat and record this case.

Sheffield.

THE ROYAL INSTITUTION.—On Friday evening, May 13th, Professor Tilden delivered an address the title of which was "Recent Experiments on Certain of the Chemical Elements in Relation to Heat." After a brief sketch of the investigations of specific heat made by the earlier observers—such as Dulong, Petit, Regnault, and others—he said that the discrepancies in the results obtained were probably due to the metals examined not being in a state of purity, and that Dulong and Petit's law, according to which the product of the atomic weight and specific heat of an element is a constant number, is only approximately true. Experiments were shown with fusible metal, fusing and welding of platinum foil, galvanically deposited antimony, soluble and insoluble chromium chloride, &c., and also with Professor Joly's differential steam calorimeter. In the library Mr. Goold of Nottingham showed the production of rapid circular motion of tassels and paper discs by means of vibrating steel bars.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

LONDON HOSPITAL.

A CASE OF PARTIAL RETROFLEXION OF THE GRAVID UTERUS PERSISTING TILL THE END OF THE EIGHTH MONTH; SPONTANEOUS DELIVERY.

(Under the care of Dr. G. E. HERMAN.)

THE rarity of the condition present in the following case is very great and the value of the record is enhanced by Dr. Herman's remarks. For the notes of the case we are indebted to Dr. H. M. Rigby, resident accoucheur, and Mr. J. F. Walker, clinical clerk.

A woman, aged twenty-seven years, was on Feb. 28th, 1898, admitted into the London Hospital under the care of Dr. Herman. The patient had had no previous illness. She had menstruated regularly and without pain from the age of fourteen years until the last week in June, 1897. She was married in March, 1897. She saw nothing after the last week in June, 1897. In the second week of November she found that she could not pass urine. She sent for a medical man, who relieved her with a catheter. A week later she was again unable to empty the bladder and it was emptied with a catheter. In the following week she again had retention of urine. The medical man passed a catheter as before, but on no occasion did he make any further examination than what was necessary for the passage of the catheter. From this time until Feb. 22nd, 1898, she had no further trouble, but then she began to have pains which she took to be those of labour. She sent for Dr. H. Richardson, who found the condition which will be described. She was removed to the London Hospital in order that her condition might be more thoroughly investigated.

On admission to the hospital the abdomen was found to contain a swelling, mainly to the right of the middle line, which reached to the lower ribs. The fœtal heart was heard over it, most loudly at about the level of the umbilicus. The girth at the umbilicus was 35 in.; midway between the umbilicus and the pubes it was also 35 in. The distance from the umbilicus to the right anterior superior iliac spine was 8 in., to the left anterior superior iliac spine 7½ in., to the pubes 7 in., and to the ensiform cartilage 6½ in. The measurement between the internal borders of the anterior superior iliac spines was 9¼ in., between the iliac crests it was 11¾ in., and the external conjugate diameter was 7½ in. By the vagina there was felt a firm, rounded swelling which filled the hollow of the sacrum and which was covered in front by the posterior vaginal wall. There was room enough to allow the finger to pass between this swelling and the pubes. The vagina ran directly upwards behind the symphysis, but the finger could not reach the top of it. No os uteri could be felt.

After admission the patient was anæsthetised and examined. It was made certain that the os uteri was not within reach of the finger. The whole hand was then inserted into the vagina; and when this had been done the os was felt to the right and so high up that it could not be reached without the introduction of the whole hand. The os uteri was large enough to admit a finger, but not larger. After the examination under anæsthesia the patient had no labour pains and no trouble with micturition until the evening of March 3rd. She then began to have slight pains in the lower abdomen and back, and amniotic fluid commenced to run away. On the 7th a digital vaginal examination was made and the condition was found to be the same as it was before. The os uteri was quite out of reach of the finger. The pains continued. On the 9th a digital vaginal examination was again made. The state of things was the same, the os uteri being

still out of reach. Some meconium came away. During the night and the following morning the pains increased in severity and frequency, and at 3.15 P.M., during the absence of the resident accoucheur, the breech of the child was expelled without resistance. The legs were extended. There was delay in the delivery of the head, which had to be manually extracted. The child was born dead. The mother recovered without any unfavourable symptom.

Remarks by Dr. HERMAN.—The above case is published because such cases are rare and those showing that the delivery may safely be left to nature are still rarer. G. Veit[1] collected 11 such cases and Depaul[2] has recorded two others. These are all that I have found. The majority of the patients, as in the above instance, were primiparæ and, also as in the above case, most of the labours came on prematurely. In most of them some interference was thought to be necessary; either the body of the uterus was pushed up or the cervix was pulled down, as in Oldham's case. These manœuvres were probably harmless but unnecessary. Michaelis manually dilated the cervix, and Depaul in one of his cases incised the os uteri so that he might manually deliver. In his other case Depaul incised the uterus through the posterior vaginal wall, with the result that the patient died. The only cases which have been left to nature have been under the care of English physicians—viz., those of Merriman,[3] Ramsbotham,[4] and the one above reported. In each of them delivery took place, the displacement of the uterus having no more serious effect upon the labour than to somewhat prolong it.

The most difficult clinical question in these cases is the diagnosis between pregnancy in a uterus misshapen in this unusual way and (1) extra-uterine pregnancy under the peritoneum behind the uterus, a condition which is probably more common than the former. It was to decide this question that the patient was admitted into the hospital. The diagnosis is made by finding or not finding the uterine body in front of, and distinct from, the fœtus-containing cavity. In this case the difficulty was to find the os uteri; when this was done it was found that the os led into the cavity which contained the fœtus and there was no uterine body distinct from the main swelling. 2. Very similar physical signs to those in this case may be given by a fibroid in the posterior wall of the uterus occupying the hollow of the sacrum, with pregnancy in the uterine cavity above the fibroid. I have published such a case in which I performed Cæsarean section.[5] The complication of pregnancy with a fibroid in the true pelvis of about the same size as the head or breech of a fœtus is very unlikely to happen. The only criterion I can point out is the great elevation of the os uteri in persistent retroflexion of the uterus. Were a pregnant uterus so pushed up by a fibroid that its os came to lie as high as in the case now reported, the difference in hardness between the fibroid and the cavity containing the liquor amnii would be easily appreciable by abdominal examination, for such a fibroid would reach high above the true pelvis. 3. An ovarian tumour in the true pelvis ought not to cause much difficulty in diagnosis, for in this case a sulcus between the tumour and the pregnant uterus would be palpable.

BEDFORD GENERAL INFIRMARY.

A CASE OF FRACTURE OF THE BASE OF THE SKULL; NECROPSY.

(Under the care of Mr. COLBY SHARPIN.)

FRACTURES of the skull are always of interest and many problems connected with them are still unsolved. The mechanism of the production of many forms of these fractures is by no means clear. A valuable paper by Chipault and Braquehave was contributed to the *Archives Générales de Médecine* of Paris in September, 1895; it deals with the question of the mechanism by which fractures of the skull are produced.

The patient in this case was a man, aged eighty-one years, who, while he was crossing a road in Bedford, was knocked down by a cart which was going at the rate of seven or eight miles per hour. He was brought into the infirmary at 8.30 P.M. on April 9th. On admission he was comatose. Upon examining him a scalp wound 2 in. in length was discovered over the left of the occipital bone. There was also a linear fracture in the occipital bone, but no displacement had occurred. Over the left side of the frontal bone there was a small incised wound ¼ in. in length which was superficial. There was profuse hæmorrhage from the left auditory meatus which lasted for several hours. Dr. Ross diagnosed a fracture of the middle fossa of the base of the skull. The patient remained comatose until the time of his death, which took place at 7.30 A.M. the following day.

Necropsy.—At the post-mortem examination, which was made on April 11th, all the internal organs were found to be healthy except that there were pleuritic adhesions on the right side of the chest. The heart was full of blood, especially the right auricle and ventricle. Upon opening the skull the frontal lobes of the brain were seen to be encased in blood-clot. The base of the brain was also covered with blood-clot. There was no laceration of the cerebral substance. When the brain was removed the base of the skull was found to be covered with blood-clot, fluid blood, and serum; after clearing this away Dr. Ross discovered a fracture which extended from the linear occipital fracture before mentioned to ¼ in. beyond the petrous portion of the temporal bone. The tearing through of the superior and inferior petrosal sinuses and the left occipital and the left lateral sinuses explained the profuse hæmorrhage which occurred.

Remarks by Dr. ROSS.—With regard to the different ways in which this lesion may be caused I have seen the following various types: (1) a man falling 20 ft. from a scaffolding and alighting upon his feet fractured the middle fossa of the base of his skull; (2) a "coupler" caught by a buffer on the left side of his forehead fell backwards upon the "sleepers" fracturing the anterior fossa of the base of the skull; (3) a youth, aged sixteen years, when diving into a swimming bath struck the top of his head, sustaining a fracture of the middle fossa of the base of the skull; and (4) in the case under consideration the patient's left occipital bone was caught by the right shoulder of the pony and he being precipitated forward upon his forehead the posterior and middle fossæ of his skull were fractured. If a linear fracture be found at the point of impact and there be signs of one or other of the fossæ of the base of the skull being injured it is tolerably certain that post-mortem examination will show the vertical and basal line of fracture to be continuous.

BRADFORD ROYAL INFIRMARY.

A CASE OF ATRESIA ANI VAGINALIS.

(Under the care of Mr. W. HORROCKS.)

THE following very interesting example of a by no means common condition demonstrates forcibly the great value of Rizzoli's operation of transplantation of the anus. The name of "anus vulvovaginalis" has been applied to this variety of irregularity in development and up to the present, according to Freeman, more than sixty cases have been recorded.[1] It is rarely seen in the adult, but Dwight[2] met with an instance of it in a woman aged thirty-two years.

An infant, aged six months, was admitted into the Bradford Royal Infirmary on Jan. 26th, 1895. The patient, who was the ninth child of healthy parents, suffered from malformation of the anus. All the other children were well formed and no similar deformity was known to exist on either the father's or the mother's side. The mother was in good health while carrying the child, who was born at full term after an ordinary labour. Shortly after birth there was some difficulty in relieving the bowels and this increased as the child grew older. On admission the child was found to be well nourished and except for the malformation of the anus well developed. In the ordinary position of the anus there was no depression, but there was an elevated and discoloured tag of skin, from which a raised blue raphé reached forwards to the vaginal orifice. At the posterior commissure of the vagina was the termination of the bowel which looked directly forwards. The external genitals were otherwise well formed. On passing a probe into the rectum it travelled backwards for about half an inch and then

[1] Volkmann's Sammlung, No. 170.
[2] Archives de Tocologie, 1876.
[3] Synopsis of Cases of Difficult Parturition. 1820, p. 232.
[4] Medical Times and Gazette, 1852.
[5] New York Journal of Gynæcology and Obstetrics, June, 1893.

[1] Philadelphia Medical News, Sept. 21st, 1895.
[2] American Journal of the Medical Sciences, April, 1895.

passed in an upward direction. The probe could be easily felt through the skin when it was lying in the rectum. On Jan. 28th, the child having been anæsthetised, an incision was made encircling the anus and this incision was prolonged backwards to the tip of the coccyx. The bowel was thus freed from the surrounding tissues. It was closely adherent to the skin behind the orifice and in separating it the gut was opened, but the orifice was closed by a catgut suture. The bowel was now freed in front, care being taken to spare as far as was possible the tissues around the anal orifice. The anus was now brought backwards and fixed about an inch in front of the coccyx by deep and superficial catgut sutures. The perineum was formed in front of the anus and the aperture in the vagina was closed with catgut sutures. There was no difficulty in bringing together the two sides to form a firm perineum. The child was somewhat collapsed after the operation. The wound healed well at the back part, but there was some suppuration about the perineum which ultimately healed by granulation. The child was discharged from the infirmary a fortnight after the operation and has since done well, there being no incontinence of fæces and no obstruction at the orifice.

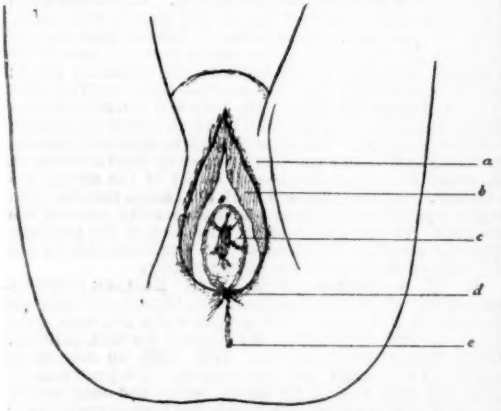

Diagram showing position of anus. *a*, Fold of labium majus separated to expose parts. *b*, Labium minus. *c*, Hymen, showing opening of vagina. *d*, Anus placed at posterior commissure of vagina. *e*, Fold of skin showing position of normal anus.

Remarks by Mr. HORROCKS.—The above case is interesting as being an example of a somewhat rare malformation of the anus. The termination of the gut opened into the cloaca, the recto-vaginal septum being imperfectly developed. The forward bend of the rectum before its final twist backwards is an indication of this condition in a normal state. The close proximity of the bowel to the skin and the tight adhesions between them may account for the rectum not being drawn upwards during development and the non-formation of the recto-vaginal septum. The elevated raphé with the rudimentary tag at the natural position of the anus shows the imperfect closure of the two halves. In a similar case which was treated some years ago a bent director was passed into the rectum and an opening was made in front of the coccyx. The margins of the communication with the vagina were then freshened and brought together with stitches. The new opening was kept open with a piece of catheter. In this case the anus was constantly contracting and frequently required dilatation, and the infant died about six months after the operation from whooping-cough. Shortly before treating the present case a description of Rizzoli's operation was seen in Ball's "Diseases of the Rectum" and the operation seemed to be suitable for the case. There was some doubt as to whether the dissection of the sphincter ani would destroy its nerve-supply and to avoid this the tissues around the anus were spared as much as was possible. The greatest difficulty of the operation was the separation of the skin from the rectum behind the anus, the parts being firmly adherent. The formation of a solid perineum seems the great advantage of Rizzoli's operation. The present case is most interesting from the fact that the sphincter is now efficient and obstruction of the bowels, which was a prominent symptom before the operation, no longer troubles the child.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Intestinal Obstruction from Thickening of the Great Omentum.—Sarcoma of the Kidney.—Presence of Fat in the Glanders Bacillus.—Intra-spinal Tumour.—Thickening of Subcutaneous Veins.—Exhibition of Specimens.

A MEETING of this society was held on May 17th, the President, Dr. J. F. PAYNE, being in the chair.

Dr. T. A. BOWES and Mr. CHARLES POWELL WHITE showed a specimen of Intestinal Obstruction due to Induration of the Great Omentum. The patient was a man, aged sixty-six years, who was treated in the Herne Bay Infirmary for tertiary syphilis and developed signs of increasing intestinal obstruction, from which he died. The great omentum was found to be much indurated and contracted, so that the lumen of the colon for a length of six inches was reduced to the size of a penholder. There was no sign of malignant disease and the condition was regarded as syphilitic.

Mr. CHARLES POWELL WHITE showed a specimen of Sarcoma of the Pelvis of the Kidney. The patient was a girl, aged six years. She had suffered from ascites for six months but had never had any renal symptoms. The kidney was not enlarged. There was a diffuse growth situated between the mucous membrane of the pelvis and the pyramids, red in colour and firm in texture. It extended beyond the hilum to the retro-peritoneal tissues about the ureter. There were secondary deposits along the whole length of the intestines and in the pancreas. Microscopically the growth consisted of round cells with well-marked nuclei in a delicate network of interlacing fibrils, in which were some branched cells.

Mr. S. G. SHATTOCK read a paper on the Presence of Fat in the Glanders Bacillus. He had been led to inquire whether the bacillus contained fat from the luminosity of the flame having often struck him whilst sterilising the loop in carrying on cultures. The method adopted was to transfer superficial portions of potato cultures to cover glasses, mix them with distilled water, and expose the material in dark chambers to the prolonged action of osmic acid vapour; examinations of the material (still moist) were made by means of the hanging drop. Careful microscopic study revealed the presence of minute points of fat, coloured deep black, in the longer forms of the bacilli. Such points were limited to the longer forms which occurred especially in potato cultures; they did not correspond either in size or number with the clear, oval, or spherical unstained areas seen in preparations dyed with carbol fuchsin; these Mr. Shattock regarded as vacuoles similar to those in the cholera spirillum. Such spherical vacuoles had, again, to be distinguished from the segmentation of the protoplasm often presented by this bacillus. The presence of fat in yeast had been long known. Brieger's analysis of Friedländer's pneumococcus had shown the presence of fat moreover in this, whilst Koch had demonstrated the same class of substance in the tubercle and Unna in the lepra bacillus. A fatty acid was elaborated again by the diphtheria bacillus. The fat, however, lay in some of these cases without or around the bacterial cells. Whether the presence of fat in the glanders bacillus was physiological or a mark of degeneration was disputable. Mr. Shattock exhibited also a series of White Mice infected with pure cultures of the glanders bacillus by subcutaneous injection. Death occurred in from two to three weeks. The chief organ affected was the spleen, which was greatly enlarged and studded with glanderous nodules in which microscopic examination showed the bacilli in an unmixed condition; the testicles were uninvolved. It was invariably stated in textbooks that white mice were immune from glanders. The disease ran a somewhat chronic course, for in the field mouse death took place in from two to eight days. The insusceptibility, in short, was relative, not absolute, in this case.

Dr. MORLEY FLETCHER exhibited a specimen of an Intra-spinal Tumour from a man, aged fifty-five years, who was under the care of Dr. Gee at St. Bartholomew's Hospital. The total duration of symptoms was sixteen months. The chief symptoms were loss of power and pains in both legs. There were no pains in the back and a striking feature in the clinical history was the very sudden termination of the case with symptoms of collapse. The growth was an oval

tumour in the lumbar enlargement arising within the posterior part of the cord near the central canal. It was a glio-sarcoma. It was pointed out that intraspinal malignant tumours were extremely rare, especially sarcomata, and that few cases have been recorded either in this country or abroad.

Dr. F. PARKES WEBER showed Microscopical Specimens illustrating an Apparent Thickening of Subcutaneous Veins. Dr. Weber said that if the superficial veins in a series of rather thin cachectic men, especially those slightly under the middle age, were felt, it would be found that in some of them the veins apparently had thickened walls, and indeed occasionally they can be rolled about like cords under the finger. As far as Dr. Weber had been able to obtain microscopical examinations he concluded that what clinically appeared to be "phlebosclerosis" was in these cases due to great development of the longitudinal unstriped muscle fibres in the most internal portion of the tunica media, and possibly also a state of contraction of the circular muscle fibres. To decide how far this condition is abnormal required further careful investigation. The condition was more noticeable in the internal saphenous veins than in the veins of the upper extremities. In the case of a man who had had syphilis two and a half years before his death (from ulcerative endocarditis) Dr. Weber found this condition to be associated in one of the internal saphenous veins with a certain amount of endophlebitis proliferans. During life the internal saphenous veins in the thighs felt like hard cords. When the veins in this case were cut open longitudinal folds were noticed similar to those described by Cornil in commencing varicose veins.—Dr. LAZARUS-BARLOW thought that caution should be observed in accepting these changes as actually due to morbid change during life. In some recent work on the lungs he had been struck with the ease in which, owing to particular methods of preparation, appearances exactly like endarteritis and endophlebitis could be produced.—The PRESIDENT also thought that it would be worth Dr. Weber's while to make preparations from normal veins. It had struck him that possibly if the veins were kept slightly distended during hardening, to the same extent as during life, that many of these appearances would not exist.

The following card specimens were shown:—

Mr. T. D. LISTER: Acute Œsophagitis in Infants.

Dr. COLCOTT FOX: Molluscum Contagiosum on the Legs of a Chicken.

Mr. H. J. CURTIS: Lipoma in the Perineum.

Mr. SHATTOCK: Guinea pigs Inoculated with (*a*) Streptococcus Pyogenes, (*b*) Coli Bacillus, (*c*) Tubercle Bacillus, and (*d*) Plague Bacillus.

Mr. C. P. WHITE: Ununited Fracture of the Scapula.

Dr. F. P. WEBER: Papillomatous Adenoma of the Kidney.

The annual general meeting was held subsequently when votes of thanks were passed to the retiring officers and members of council. The following gentlemen were elected for the ensuing year: President: Dr. Joseph Frank Payne. Vice-Presidents: Dr. Radcliffe Crocker, Dr. Frederick Taylor, Dr. F. Charlewood Turner, Dr. German Sims Woodhead, Mr. Anthony A. Bowlby, Mr. Stanley Boyd, Mr. Alfred Pearce Gould, and Mr. Robert William Parker. Treasurer: Dr. Sidney Coupland. Honorary secretaries: Mr. D'Arcy Power and Dr. Humphry D. Rolleston. Council: Dr. John Abercrombie, Dr. J. Rose Bradford, Dr. Julius Dreschfeld, Dr. Archibald E. Garrod, Dr. Herbert P. Hawkins, Dr. R. G. Hebb, Dr. William Hunter, Dr. H. A. Lediard, Dr. Hubert Montague Murray, Dr. G. Newton Pitt, Dr. J. W. Washbourn, Mr. William H. Battle, Mr. Cecil F. Beadles, Mr. Raymond Johnson, Mr. John R. Lunn, Mr. H. Betham Robinson, Mr. W. G. Spencer, Mr. J. H. Targett, Mr. Frederick C. Wallis, and Mr. Edgar W. Willett.

CLINICAL SOCIETY OF LONDON.

Cases of Intussusception.—Perforation of the Vermiform Appendix in Ambulatory Typhoid Fever.

A MEETING of this society was held on May 13th, the President, Mr. LANGTON, being in the chair.

Dr. DAVID B. LEES and Mr. A. QUARRY SILCOCK related a case of Ileo-cæcal Intussusception in which excision of involved intestine was performed with a successful result. A boy, aged four and a half years, was admitted to St. Mary's Hospital in December, 1896, on account of intussusception. Under an anæsthetic 28 oz. of water were injected into the rectum and reduction was apparently effected. He was discharged from the hospital two days later (on Dec. 30th). On Jan. 1st, 1897, he was readmitted, the symptoms having recurred with reappearance of the tumour. Reduction was again effected by injections of water. Again and again the tumour reappeared with symptoms as before, which subsided more or less completely under treatment. In the latter part of February and in March the abdominal pain became more constant; castor oil and rectal injections were frequently used to combat the constipation. At the end of March the condition of the boy became very serious. The tumour was now never wholly reducible and operation was determined upon. It was found that the parts concerned in the intussusception were the lower end of the ileum and the cæcum. The intussusception was irreducible and these were therefore excised, the ileum being divided 2 in. or 3 in. above the ileo-cæcal valve, the colon some inches below the cæcum. The cut ends of the intestines were approximated and united by Lembert and quilt sutures. The patient made an uninterrupted recovery and at the present time (May, 1898) is quite well. Examination of the specimen showed that the posterior wall of the cæcum carrying with it the appendix had been invaginated into the ascending colon; the ileo-cæcal valve had been dragged upon, carrying with it about 1 in. of the ileum. Dr. Lees and Mr. Silcock were unable to explain the mechanism by which the intussusception was brought about. The form of the intussusception seemed to belong to the same category of cases as those in which an inversion of the appendix into the cavity of the cæcum has obtained. In this case the wall of the cæcum carrying with it the appendix seems to have been the starting point of the mischief. It was clear from an inspection of the specimen that the complete reduction of the intussusception by the injection of air or water was an impossibility.

Dr. W. S. COLMAN and Mr. T. H. KELLOCK related a case of Chronic Intussusception of the Cæcum with Extreme Latency of Symptoms. The patient was a boy, aged eight years, who was admitted to the Hospital for Sick Children, Great Ormond-street, on Aug. 17th, 1897, on account of periodical abdominal pain and wasting. The paroxysms of pain had been noticed for fifteen weeks and were usually attended with vomiting. His bowels had been opened once or twice daily, the motions being solid. On admission he was thin, but his abdomen was full and somewhat resistant. There was a moveable swelling in the left flank between the iliac crest and the costal margin. It appeared to vary in size during the examination. An hour later during an attack of pain the mass became larger and harder and almost reached the middle line. In the attacks which frequently recurred the boy always placed himself on his hands and knees. It was thought at first that the case might be one of axial rotation of a wandering spleen, but later the splenic dulness could be mapped out as distinct from that of the tumour. The severe attacks of pain returned almost daily, but there was no change in the character of the motions and nothing could be felt *per rectum*. The boy was getting up and except for the attacks of pain appeared to be perfectly well until three weeks after admission and eighteen weeks after the onset of symptoms, when the vomiting and pain became severe and his general condition became serious. The character of the tumour was more definitely sausage-shaped and one end of it could be felt to be very hard. It was therefore decided to open the abdomen and this was done by Mr. Kellock on Sept. 13th. There was no free fluid in the peritoneum and no peritonitis. A large intussusception in the transverse colon and splenic flexure was found in the left hypochondrium. This was easily reduced at first, but owing to œdema and induration of the last two inches there was much more difficulty. A perforating ulcer with discoloured edges was found close to the root of the vermiform appendix. The ulcer was excised, the edges being brought together by Lembert's sutures. The cæcum was then returned to the abdomen. Two days afterwards, as there was pyrexia and tenderness over the cæcum, the wound was reopened at the lower end and some pus was liberated, but the child died. Leave for a post-mortem examination was refused. Attention was drawn to the latency of the symptoms, the bowels acting naturally throughout, and to the great variations in the size and position of the tumour. In any similar case it was suggested that if an ulcer had to be excised a fresh opening should be

made in the right iliac fossa and the cæcum stitched in position there.

Dr. LEES described a case of Intussusception of six weeks' standing successfully treated by Irrigation and the Local Application of an Icebag. A boy, aged three years, had suffered for six weeks from abdominal pain severe enough to make him scream. There had been no blood in the motions and vomiting had occurred only during the last of the six weeks. His appetite was very bad and he was wasting. A transverse swelling was detected in the position of the transverse colon which, while handled, became distinctly harder and firmer, afterwards softer again, obviously from peristaltic action. Under chloroform the tumour was felt more easily and the peristaltic hardening was still more evident. 25 oz. of water were passed into the rectum under low pressure and soon the tumour became shifted towards the right. The irrigation was repeated but apparently without further effect. A good deal of mucus came away but no blood. A few hours later the swelling occupied a vertical position in the line of the ascending colon; evidently the reduction was incomplete. Remembering that in fatal cases of intussusception most difficulty is experienced in reducing the last half-inch which is swollen through congestion, Dr. Lees applied an icebag over the cæcal region, taking care to keep the child's feet and legs warm with hot-water bottles. The icebag was kept in place for eight days; it was well borne, but hot fomentations were occasionally applied over the bladder to assist micturition. After the ice had been applied for four days the tumour was found to be less distinct. Three days later only a small rather hard lump, somewhat resembling a gland, could be detected. The appetite had greatly improved and during the week the child gained 2 lb. in weight. After eight days the ice was removed and another large enema was administered; this produced a copious motion. The small lump could now no longer be felt. Recovery was complete, and five months later it was found that the boy was still quite well and nothing abnormal could be detected in his abdomen. In this case, though the symptoms were subacute, the history of severe abdominal pain for six weeks, the characteristic position and shape of the tumour, the peristaltic hardening, and the effect produced by irrigation left no doubt as to its nature. It is well worthy of note that the intussuscepted intestine, even after six weeks, had not become fixed by adhesions and that it was still possible to obtain a very definite amount of reduction by irrigation. Yet it would probably have been necessary at last to open the abdomen if it had not been for the assistance rendered by the icebag, which apparently reduced the congestion of the wall of the intestine and allowed a final enema to complete the reduction. Dr. Lees admitted that there was a difficulty in the adoption of this method of treatment in an acute case of intussusception because of the marked tendency to collapse, but he considered the plan worthy of further trial in subacute cases.—Mr. BARKER congratulated Mr. Silcock on his success in saving by resection a case of intussusception which was in so severe a condition. Such a result was very rare. The most important question raised by this interesting series of cases was that of the desirability of resorting to injection or of proceeding at once to laparotomy. It was true that some cases got well with injection alone, but there were many in which from the outset such a procedure was hopeless. In a series of cases of intussusception brought before that society early in the session he had shown that out of 15 consecutive cases in which he had performed laparotomy for this condition no less than 3 were cases of enteric or ileo-colic intussusception which could not possibly have been reduced by injection. Five of his cases died, three of them being gangrenous at the time of operation. The results he had obtained encouraged him to earlier and freer operation in the future. He considered injection inadvisable as it not only involved delay but was not without risk, and he was convinced that immediate operation was the best mode of treatment in the average hospital case. In one of his cases there had been a thickening of the cæcum similar to that described by Dr. Colman and Mr. Kellock in their case. It was only by squeezing and a sort of massage that he was able to reduce the tough wall and keep it reduced. He did not think that there was much risk of recurrence after reduction. He thought that many of the apparent exceptions to this rule were cases in which reduction had been incomplete. He had, however, seen one case in which recurrence took place some months after operation. He mentioned one case in which on opening the abdomen he found a mass in the transverse colon which was at first thought to be the intussusception, but which proved to be a tuberculous mass, the real intussusception being found in the right iliac region. Although the intussusception in this case was an enteric one there was no vomiting.—The PRESIDENT thought that most surgeons would agree that in acute cases injection only gave rise to delay and often to a false sense of security when the intussusception had not been completely reduced. Even in chronic cases rupture might be caused by irrigation at low pressure. The operation in itself was not so dangerous as the delay and the nature of the disease. When injection was employed, too, it was impossible to feel whether the all-important last portion of the intussusception had been completely reduced.—Dr. LEONARD GUTHRIE said that diagnosis came before treatment and was often a matter of great difficulty. Some years ago he had had a boy, four years of age, under his care for some weeks suffering from paroxysmal abdominal pain. He had repeatedly examined the patient but could find no tumour either during the paroxysm or in the intervals. He never passed blood or mucus, but one day he was brought to the hospital with the ileo-cæcal valve protruding from the anus. He thought that a condition of "incipient intussusception" had been present all along and that from time to time spontaneous reduction had taken place and that strangulation and severe symptoms had occurred acutely. He agreed that in acute cases irrigation was unwise seeing that one was in the dark as to the condition of the bowel.—Dr. F. J. POYNTON said that it was often impossible to make a correct diagnosis unless the patient was seen at very frequent intervals. In the absence of blood and mucus in the stools the diagnosis would rest on the presence of a tumour of variable resistance, shape, and position which disappeared from time to time, reappearing with a fresh attack of abdominal pain.—Mr. SILCOCK, in reply, said that injection had been employed in the first instance in his case because at that time the tumour was of very recent formation and was freely moveable.—Mr. KELLOCK, in reply, said that he did not think that so little risk was involved in opening the abdomen in a child as had been suggested. The experience at Great Ormond-street was that in young infants laparotomy was an extremely dangerous operation no matter for what purpose it was performed. The risk might be minimised by making the smallest possible incision and introducing one, or at most two, fingers as Mr. Barker had suggested. Since this paper was written he had operated on another case of intussusception of the cæcum into itself. In this case also the child assumed the unusual genupectoral position. The intussusception was reduced and the child made a good recovery.—Dr. LEES, in reply, concurred in the view that peritoneal operations on young children were attended by great risk. He had not seen such favourable results after operation as Mr. Barker had obtained, but, on the other hand, he had seen many cases in which recovery had taken place in acute cases after injection alone. In many, surgical operation, performed immediately after injection had failed, had been equally unsuccessful.

Dr. ROLLESTON recorded a case of Perforation of the Vermiform Appendix during the course of Enteric Fever. The patient was a man, aged twenty-one years. Twelve hours after admission to St. George's Hospital with enteric fever abdominal pain and signs of collapse came on. After palliative treatment by morphia it was decided that perforation had probably occurred; the liver dulness remained, and it was thought that the perforation had been small and not allowed of the entry of gas into the peritoneum. Mr. T. Pickering Pick performed laparotomy and found fibrinous peritonitis due to perforation of the appendix close to the cæcum. The appendix was removed, the stump being invaginated into the cæcum, the peritoneum was washed out and a tube left in for drainage. On the next day the Widal reaction was found by Dr. C. Slater to be strongly marked. The patient rallied temporarily after the operation, but died on the second day, this fatal result being probably due to grave constitutional symptoms and to the fact that he had been at work to within five days of his death. At the necropsy ulceration of the intestine of a typhoid character was found. The points of interest in the case were (*a*) the frequency of appendicular lesions in enteric fever and (*b*) the question of operative interference during the height of the fever. In 14 out of 60 fatal cases of enteric fever examined in St. George's Hospital the appendix was found to be altered, being

swollen in 5, ulcerated in 7, and perforated in 2. In those 60 cases perforation (including the appendix cases) occurred in 18, so that the appendix was perforated in 11 per cent. of cases of entire perforation. This was the percentage arrived at by Nacke; Osler found it even higher (4 in 16), while Finney placed it at 5 per cent. and Fitz at 3 per cent. The statistics of operative interference in perforation during enteric fever were referred to and 2 recent cases reported by Deaven in which a perforated appendix was successfully removed during enteric fever were mentioned.—Dr. E. W. GOODALL was surprised to hear that the complication was so frequent. Although he had a somewhat extended experience of enteric fever at the fever hospitals he had not yet come across a single case. He had seen one case of operation for perforation in enteric fever. The patient was a girl, eight years of age, who was suffering from a recrudescence of enteric fever. She was exceedingly ill and the operation was somewhat prolonged owing to difficulty in finding the site of the perforation. It was also noticeable that there was little sign of the other typhoid ulcers from the outside of the gut, although they were shown after death to have been numerous. The aperture was closed by sutures. The patient lived four days. It was found that not the slightest attempt at repair had taken place and another perforation had been caused by one of the sutures having been passed through an adjoining ulcer. He agreed with Mr. Bland Sutton that it would be better in such a case to bring the perforation up to the abdominal incision and fix the gut there. Dr. Goodall mentioned that Mr. Parkin of Hull had operated successfully in one case of perforation and there were two more successful cases in the recent reports of the Belvidere Hospital, Glasgow.—Mr. BARKER took exception to the wording of a statement that "the mortality after surgical treatment was appalling." The cases without operation might be considered as uniformly fatal, while after operation 23 per cent. had recovered, which was encouraging.—Dr. ROLLESTON, in reply, said that he had also been surprised to find that the condition occurred in so large a percentage of cases. Most of them were derived from American literature.

SOUTH-WEST LONDON MEDICAL SOCIETY.

The Proposed Midwives Bill.

A MEETING of this society was held at Wandsworth Town-hall on May 4th, under the presidency of Mr. T. A. I. HOWELL, to discuss the questions raised by the proposed Midwives Bill.

The PRESIDENT argued that among the reasons for the Bill were the facts that in a large proportion of the women attended by unskilled persons the mortality both among mothers and children was increased and that those cases also were responsible for much of the ophthalmia neonatorum which later drifts towards the hospital. For these and other reasons it is agreed on all hands that something ought to be done. In a general criticism of the Bill he pointed out the necessity for limiting the responsibility to the person who actually had the conduct of the case and called attention to the omission from the Bill of all reference to stillbirths and the absence of any clause making it necessary on the part of the proposed midwife to provide a certificate of character. He pointed out the necessity, in his opinion, of protecting the practice as well as the title of the medical man and of restricting the practice of the midwife solely to the functions which she was intended by the Bill to fulfil. He showed that by-laws cannot be made contrary to the spirit of the Act, which seems to be the case in the Bill under consideration. As regards local funds they ought not to be available for expenses incurred in carrying out the provisions of the Act, and he especially objected to Clause 9, which virtually appoints medical detectives. Public opinion, he was sure, was generally adverse to the passing of such a measure.

Mr. ROWLAND HUMPHREYS said that the proposed Bill was only there in outline and that the details were left to be filled in by the board. He assured the meeting that deputations representing 20,000 persons in favour of the Bill had been received and that petitions to the same effect were constantly being sent in. Legislation had been hampered to a great extent by the views taken of the matter by various women's societies. He thought that a certificate of character would be of no use and that it would be a very difficult thing to provide against the risk of the midwife practising for gain.

Dr. EDEN said that since the Bill had been condemned by the General Medical Council it ought not to be allowed to pass into law. The Bill should have been promoted by the profession at large and not by any particular body, no matter how good their intentions. At present there were no means of dealing with midwives who were deserving of censure; they were practically under no control. This was very different from the regulations on the Continent—in Italy, for example, where every midwife must give full particulars of each case which she has attended to the local authority. There, also, midwives are trained gratuitously, but in this country the probabilities are that the certified midwife will not reach the class for which she is intended—viz., the very poor.

Dr. MCCOOK WEIR said that if this Bill passed the midwives would ultimately treat all diseases of women and children. He stated that the signatures in favour of the Bill were obtained by canvassing, that in his opinion the constitution of the Midwives' Board was bad, and that the General Medical Council had been overridden by the Privy Council and by other influences. He gave an outline of a Bill prepared by himself which he would call the Obstetric Nurses Bill and was strongly of opinion that a certificate of character was a most essential qualification.

Dr. BARKWELL spoke against the Bill.

ÆSCULAPIAN SOCIETY OF LONDON.

The Management of Labour in Contracted Pelves.—Sacral Spina Bifida with absence of Skin Covering and with Skull Bones imperfect.—Spontaneous Complete Disappearance of Large Rheumatic Fibromata.

A MEETING of this society was held on May 13th, the President, Dr. B. G. MORISON, being in the chair.

Dr. THOMAS G. STEVENS read a paper on the Management of Labour in Contracted Pelves in which he related particulars of the following cases:—

Full-Time Children.

—	Primipara or Multipara.	Age.	Diagonal conjugate in inches.	Operation.	Weight of child.	State of child at birth.
1.	P.	22	3¼	Craniotomy. Prolapsed funis.	—	Stillborn.
2.	P.	32	3¼	Symphysiotomy and forceps.	—	Stillborn
3.	P.	22	3½	Craniotomy.	7 lb. 11 oz.	Stillborn.
4.	M. (7th)	30	3½	Version.	7 lb. 4 oz.	Alive.
5.	P.	31	3¼	Version and craniotomy.	9 lb.	Stillborn.
6.	P.	26	3¾	Forceps.	7 lb. 5 lb.	Dead. Alive.
7.	P.	?	3¼	Replaced funis.	4 lb. 8 oz.	Alive.
8.	P.	25	3	Version.	6 lb. 12 oz.	Stillborn; white asphyxia.
				Induction Cases.		
9.	P.	25	2¼	6th month.	—	Stillborn.
10.	M. (2nd)	34	3¾	8th month. Forceps.	—	Alive.
11.	M. (5th)	38	3	8th month. Version.	—	Stillborn.
12.	P.	—	—	5th month. Kyphotic pelvis.	—	Stillborn.
				Premature Labour not Induced.		
13.	M. (2nd)	25	3¼	Version.	—	Alive.

All mothers recovered. 5 children were born alive and 9 were stillborn.

He emphasised the great inadvisability of hurry in these cases, pointing out that a maternal pulse of 110 per minute is safe unless the well-known signs of exhaustion in the parturient are present. For the child forceps delivery was better than version.

Mr. W. CAMPBELL M'DONNELL showed a drawing of Sacral Spina Bifida with absence of Skin Covering and the Specimen of the Defective Sacrum. The skull was also very imperfect, the frontal bones being separate 7·5 cm. On the fifteenth day the child had three epileptic fits and then died. Delivery had been quite normal.

Mr. M'DONNELL also read notes of the Complete and Spontaneous Disappearance of Fibromata, 2·5 cm. in diameter, of rheumatic origin, from a man, aged thirty-one years, the subject of previous acute rheumatism without cardiac lesion.

BRITISH GYNÆCOLOGICAL SOCIETY.

Exhibition of Specimens.—Risks to the Ureters when Performing Hysterectomy.

A MEETING of this society was held on May 12th, the President, Dr. MACNAUGHTON-JONES, being in the chair.

The following specimens were exhibited:—

Mr. J. FURNEAUX JORDAN: Myoma of the Uterus removed by Hysterectomy.

Dr. GRANVILLE BANTOCK: Uterine Fibroid removed by Hysterectomy.

Mr. CHARLES RYALL: Large Uterine Fibro-myoma removed by Abdominal Hysterectomy.

Mr. F. BOWREMAN JESSETT: Uterine Fibroid Complicating Pregnancy.

In the discussion on these four specimens the following gentlemen took part: Dr. HEYWOOD SMITH, Dr. PURCELL, Dr. NEIL MACPHATTER (Denver, Colorado), Dr. ARTHUR GILES, and the PRESIDENT.

The following card specimens were exhibited:—

Mr. W. D. SPANTON (Hanley): Biliary Calculus.

Dr. T. DOLAN (Halifax): Intra-uterine Myoma.

Dr. F. A. PURCELL read a paper on the Risks to the Ureters when Performing Hysterectomy, illustrated by a case in which both ureters were occluded and freed fifty-eight hours after. He dealt with the risks to the ureters when performing abdominal hysterectomy in which the combined method is employed—in other words, pan-hysterectomy—illustrating his remarks by quoting a case and showing the specimen of a large adeno-carcinoma of the uterus with a diseased os and a much enlarged and widely distended neck. During the operation both ureters became compressed and no urine was voided from the bladder. Fifty-eight hours after the first operation the patient was anæsthetised and the abdomen was again opened, the laced peritoneum across the floor of the pelvis, which was intact and free from inflammation, was ripped asunder and the ureters were examined. Both were found to be ballooned. The silk ligatures on the uterine arteries were cut through and removed; by this means the patency of the ureters was restored and urine flowed into the bladder, the toilet was again performed and eventually the patient made an uninterrupted recovery. Dr. Purcell then reviewed the relations of the uterine arteries and the ureters and stated that one, if not the greatest, risk that presented itself in performing pan-hysterectomy was the endangering of the ureters. He regarded the uterine artery as being the most important vessel surgically, running its course downward and inward between the folds of the broad ligament until it arrives at a point below the level of the os internum just above the lateral fornix, where it makes a sharp turn across the ureter to the neck.—Mr. BOWREMAN JESSETT said that Dr. Purcell's case was interesting from many points of view and, among others, from that of diagnosis. The question lay between malignant disease and a sloughing fibroid; and the conclusion, which was borne out by the operation, was that it was a sloughing fibroid which was becoming malignant. One lesson from the case was that it might have been better to divide the arteries and tie them after the removal of the tumour. The ureters were not included in the ligatures, but were kinked by the puckering up of adjacent tissues.—Dr. GEORGE KEITH related a case which he had seen in Edinburgh some fifteen years previously, in which a small piece of tube was found on an ovarian tumour after its removal. It was sent to a pathologist to be examined and he reported that it was not ureter. However, the necropsy showed that a piece of ureter had really been removed.—Dr. NEIL MACPHATTER had had trouble with a ureter in his first hysterectomy. The tumour was very large, weighing 46 lb. after removal, and was operated upon under the impression that it was ovarian. While separating adhesions a uniform band was noticed and he was about to divide it when his assistant suggested that it might be ureter. This timely suggestion saved the patient. The ureter had become so much elongated by the tumour that after it was freed it lay in a little coil.—The PRESIDENT observed that in these cases the normal relations were so disturbed that exact anatomical knowledge might be of little avail and injury was generally due to displacement or congenital anomaly of the ureter. In Doyen's method of pan-hysterectomy the risks to the ureters were minimised, especially because he adopted the plan of drawing the uterine and ovarian arteries out of the surrounding tissues, securing the vessel alone. He had written to several eminent operators asking their experience with the ureter. Howard Kelly had promised to send statistics, and Martin of Berlin, Doyen of Paris, and Kufferath of Brussels had written giving their experience. These letters the President read. To Howard Kelly, whom they had had the pleasure that evening of proposing as a Fellow of the society, they were indebted for some of the most important advances in the protective and reparative surgery of the ureters. To him was due the method of ureterostomy and through his work on the Catheterisation of the Ureters they were able to determine which kidney was affected in cases where nephrectomy was required, thus obviating the necessity of a preliminary abdominal section. He congratulated Dr. Purcell on his boldness and success under very trying circumstances.—Dr. C. H. F. ROUTH suggested that when uræmic symptoms threatened and there was reason to fear injury to the ureters it might be advisable as a preliminary step to open the kidney from behind. By this means present danger could be averted and a secondary operation could be performed later if necessary.—Dr. PURCELL, in reply, thought that when the injury to the ureter was discovered at the time of operation Dr. Routh's suggestion might be adopted with advantage. But if it were not found out till later it would be necessary to first determine which side was affected. As a rule, if one side only were injured the remaining kidney would go on excreting and there would then be no danger of uræmia.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.

Combined Pleural and Pericardial Adhesion.

A SPECIAL meeting of this society was held on April 27th, Dr. CATTLE, President, being in the chair.

Dr. FREDERICK TAYLOR read a paper on Combined Pleural and Pericardial Adhesion. Dr. Taylor described the case of a woman, aged forty-two years, who was admitted to hospital for dyspnœa, cough, and pain in the chest. Five months previously she had noticed that her abdomen was getting larger. A month previously she had chills, shivering, dyspnœa, pain between the shoulders, and cough. Œdema of the legs followed and the physical signs of fluid at the right base. This was explored without result. On admission the physical signs of right pleural effusion persisted and the left base presented the same in less degree. The heart's impulse was felt in the normal position. The dulness was normal in extent. The pulse was regular, but feeble and rather rapid. There was no murmur. The urine a few days later contained some albumin. The patient never improved. The general condition and physical signs remained much the same, but the dyspnœa increased as well as the anasarca. She died about six months after admission. The post-mortem examination revealed universally adherent pleura and adherent pericardium. The lungs were compressed and airless except at the apices. Some bronchial tubes were dilated. The vessels and other structures in the mediastinum were matted together by inflammatory tissue (mediastinitis). The peritoneum was universally thick and opaque and presented some recent lymph as well. The right auricle was dilated, the right ventricle was dilated and hypertrophied, and the left ventricle was very small. Dr. Taylor pointed out that the mere

co-existence of pericardial and pleural adhesions was common as found post mortem, but a very small proportion of them seem to present the features seen in this case—great prominence of the physical signs on the side of the pleura and absence of local evidence on the side of the heart. The etiology of this case was obscure. There was no history of rheumatism or acute pneumonia, and other causes of multiple serous inflammations were not present with the exception of scarlet fever. The consideration of the relation of the different serous inflammations to one another and to the symptoms showed that the pulmonary lesion seemed unequal to the production of the symptoms except through the failure of the right heart and no doubt the dilatation of the right cavities as a result of adherent pericardium was the chief cause of the dropsy. Dr. Taylor referred to an interesting paper by Heidemain, who showed that ascites was likely to occur as an early symptom in adherent pericardium, probably because there had been with the pericarditis simultaneous peritonitis. This had a possible bearing upon the present case. The subject of mediastinitis was then discussed and its probable influence on the symptoms in this case was shown to be small. In the diagnosis Dr. Taylor suggested that the co existence of lesions in two or more serous membranes as the result of former inflammations rather increased than lessened the difficulties in diagnosis, especially in consideration of the interaction of the heart and lungs one upon the other. The chief guide is probably the recognition of adherent pericardium acting upon the right heart as a possible cause of failing circulation. When the local evidence of heart disease is not forthcoming the suspicion of adherent pericardium may be strengthened by evidence that the pleura is, or has been, inflamed. Dr. Taylor referred in conclusion to another case in which a similar diagnosis seemed allowable.

The PRESIDENT thanked Dr. Taylor for his interesting address and Dr. HANDFORD proposed and Mr. CHICKEN seconded a vote of thanks to Dr. Taylor which was carried unanimously.

PATHOLOGICAL SOCIETY OF MANCHESTER.

Exhibition of Cases and Specimens.—Empyema of Fronto-ethmoidal and Sphenoidal Cavities.

A MEETING of this society was held on May 11th, Mr. C. E. RICHMOND, President, being in the chair.

The PRESIDENT showed and described a case of Fibro-adenoma in a Breast the seat of chronic mastitis.

Dr. REYNOLDS and Dr. MOORE showed specimens from a case of Acute Hæmorrhagic Pancreatitis met with in a male subject, aged twenty-nine years. During life the patient had suffered from several pseudo-angina-like attacks. The fatal termination was very sudden, being ushered in by somewhat anomalous mental symptoms. The pancreas, examined nine hours after death, was enlarged, weighed 146 grammes, was firm, and of a bright red colour mottled with dark grey and yellowish patches. The duct was patent and normal in size. Microscopically the peri-glandular fat showed areas of necrosis and masses of decolourised and more recent blood-clot; the gland parenchyma in many parts appeared but little altered, the individual acini being more widely separated than normal; in other parts it was in a condition of coagulation necrosis or had disappeared entirely, its place being occupied by a necrotic débris. The interstitial tissue was the seat of considerable exudation, having decided hæmorrhagic characters and here and there small foci of suppuration. In the necrotic areas the bacillus coli communis was found both by cultivation and histologically, but no other organism. The first part or the duodenum was the seat of an acute necrotic inflammation, the mucous membrane being necrosed and in great part absent, the submucous and muscular coats being markedly infiltrated and congested.

Mr. E. STANMORE BISHOP showed several Microscopic Sections of a Non-gravid Tube from a case of Ectopic Pregnancy in order to illustrate the changes described by Webster of Montreal. For purposes of comparison sections of ordinary decidual membrane of a normal and of an inflamed Fallopian tube were also shown, these having been kindly lent by Dr. Fothergill. Other sections were shown from the gravid tubes of both cases showing chorionic villi and one mucous fringe with well marked decidual change. Mr. Bishop detailed the changes found in these tubes, the differences between such changes and those found in ordinary salpingitis, and emphasised the fact that if these observations were confirmed a clear idea would be obtained as to the causation of such cases and a scientific reason for the commonly accepted belief that all ectopic pregnancies are primarily tubal.

Dr. KELYNACK showed a specimen of Dissecting Aneurysm of the Thoracic and Abdominal Aorta which developed in a female, aged fifty years. There was a history of strain from which the cardiac symptoms dated. Death was due to progressive cardiac failure. The aneurysm originated by a slit-like aperture in the descending thoracic aorta and reached to the common iliac arteries. There were several communications between the sac and the aorta.

The following card specimens were exhibited:—

Mr. STANMORE BISHOP: (1) Ureteral and Vesical Calculi; and (2) Pyosalpinx.

Dr. FOX EDWARDS: Flattened Bullet removed from the Nasal Bone.

Dr. HARRIS: Aortic Aneurysm compressing the Trachea from a Female Subject.

Dr. HIGGINSON: Supernumerary Digit.

Dr. KELYNACK: Aortic Malignant Endocarditis from a Medico-legal Case.

Mr. RICHMOND: Cerebellar Abscess following Mastoid Disease.

Dr. STELL: Melanotic Sarcoma of the Liver and Kidney.

Mr. WESTMACOTT: (1) Localised Tubercle of the Vocal Cords; (2) Carcinoma of Sinus Pyriformis; and (3) Trauma of the Larynx in a Sword-swallower.

Mr. WOLSTENHOLME: Epithelioma of the Glans Penis in a Horse.

Mr. WESTMACOTT read a paper on the Pathological Anatomy of Empyema of Fronto-ethmoidal and Sphenoidal Cavities. After demonstrating the anatomical limits of the cavities met with in different skulls, both in the recent state and macerated condition, the appearances of the part when filled with pus were described as seen through the nasal speculum and with the rhinoscopic mirror. Finally, a few points of interest in differential diagnosis and operative treatment were detailed. A number of prepared specimens and photographs were shown.

NORTH OF ENGLAND OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY.

Exhibition of Specimens.—Rupture of the Vagina during Labour.

AN ordinary meeting of this society was held at Owens College, Manchester, on April 22nd, Dr. J. W. MARTIN, the President, being in the chair.

Mr. RUMBOLL (Leeds) showed a large Fibroid Tumour of the Uterus removed by Abdominal Hysterectomy. Treatment by electrolysis had failed to have any effect on the growth. In removal the "serre-nœud" was used and the stump was brought to the incision.

Dr. DONALD (Manchester) showed the Uterus and Appendages which he had removed from a patient, about thirty years of age, who had been suffering for eight months from Acute Pelvic Inflammation. On the left side the ovary was represented by a thick-walled abscess of about the size of an orange; the tube was thickened and its abdominal end was blocked and adherent to the abscess. On the right side the tube was elongated and much thickened and the abdominal end was closed and studded with small caseous patches; the right ovary was small and was embedded in adhesions. The uterus was enlarged and globular and the walls were much increased in thickness. The patient was unfit for work, was almost entirely confined to bed, and had suffered from hæmorrhage constantly for four months. After palliative treatment in the hospital for four weeks without any change in her condition operation was decided upon and the vaginal route was chosen. Both tubes were useless from purulent inflammation, and the mischief having evidently commenced in the endometrium extirpation of the uterus was thought best. Dr. Donald remarked that the radical vaginal operation for bilateral tubal and ovarian suppuration had not so far met with much support in this country, although for some years it had been recognised on the Continent as the best means of dealing with cases which did not improve under rest and palliative treatment. The removal of the uterus added nothing to the danger of removing the appendages. After removal of the appendages the uterus was a useless organ and the objections to its removal were

mainly sentimental. When the uterus was healthy and the appendages were not septic there was no need to remove it.

Dr. DONALD then read notes of a case of Rupture of the Vagina during Labour. The case was that of a woman, about forty years of age, who had in her ninth confinement been attended by a midwife. When the patient was admitted to the hospital a very distended and congested loop of large intestine 2 ft. in length was hanging from the vagina; the funis was prolapsed, cold, and pulseless. There was a large rent in the posterior vaginal wall; the cervix was about two-thirds dilated, the vertex presenting in the right occipito-anterior position. Craniotclasm was performed and after the extraction of the fœtus and the expulsion of the placenta it was found that the tear in the posterior vaginal wall began at a point 1 in. from the posterior commissure of the vulva, ran transversely for about 2 in., and then almost vertically and a little to the left of the middle line up to the highest point of the posterior vaginal fornix. The uterus was loosely packed with iodoform gauze and the hole in the vaginal vault was plugged with several thick strips of iodoform gauze which were removed from the uterus fifty-six hours after delivery, but not from the abdominal cavity until the seventh day. The patient made an uninterrupted recovery.

Dr. W. K. WALLS (Manchester) described a case similar to Dr. Donald's but less severe. It was that of a patient in her eighth confinement with conjugata vera of 3¾ in. and with a history of having borne large children and of having had forceps labours. The breech was impacted, chloroform was administered, and a leg was brought down; the arms were delivered with difficulty, the head extraction being comparatively easy. A laceration was discovered in the neighbourhood of the right sacro-iliac synchondrosis external to the cervix; the laceration admitted two fingers which passed into the tissue of the broad ligament and then into the peritoneal cavity. The tear was plugged with iodoform gauze, the cervix uteri was plugged separately, and the vagina was tightly packed with iodoform gauze beneath all. A good recovery was recorded.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF OBSTETRICS.

Discussion on Obstetric Report of Rotunda Hospital.—Exhibition of Specimens.

A MEETING of this section was held on April 27th, the President, Dr. F. W. KIDD, being in the chair.

Dr. R. D. PUREFOY having read the Clinical Report of the Rotunda Lying-in Hospital for 1896-97,

Dr. MACAN said that as an old master he would like to offer his congratulations to Dr. Purefoy upon the success of his first year. He did not agree with Dr. Purefoy in his four hours' teaching of putting on forceps in the second stage. He thought that every student should be given absolute indications for putting on forceps. As regards morbidity, the limit of normal during his mastership was 100·4, instead of 100·8 as at present. He was tolerably content with the treatment of eclampsia by chloroform and chloral hydrate in large doses. There was no objection against morphia as well.

Dr. A. SMITH said that if the mother's temperature was raised and her pulse was quick, or if the child showed pressure effects, such as quickening or slowing of the heart, and meconium was passing away, with vertex presenting, the forceps should be used.

Dr. SMYLY was struck with the steady increase in the deliveries in the Rotunda Hospital. There was also a decrease in the mortality, mainly due to antisepsis and asepsis, but also due to the discipline in the hospital. Results in private practice were not at all commensurate with those in hospital practice, chiefly, he thought, due to the rules being carried out in a perfunctory manner. Regarding mortality, in contrast to the results of late years, he read the following from an old Rotunda Hospital report:—

In 1869	there were	1159	deliveries	with 25	deaths.
,, 1870	,,	1087	,,	27	,,
,, 1871	,,	1161	,,	33	,,
,, 1872	,,	1193	,,	20	,,
,, 1873	,,	1191	,,	32	,,
,, 1874	,,	1238	,,	15	,,

The PRESIDENT said that formerly the fact of a man being master of a lying-in hospital was against his private practice on account of his being daily in touch with septic cases. Now, however, as shown by statistics, a lying-in hospital was the safest place for a woman to be delivered in. He thought there was some serious mismanagement in connexion with private cases, probably because the nurse did not carry out the rules as she would under a matron in hospital. Regarding the removal of retained membranes not accompanied by hæmorrhage he thought it better not to introduce the hand to remove such.

The following specimens were shown:—

Dr. W. J. SMYLY and Dr. R. D. PUREFOY: Myomatous Uteri.

Mr. E. H. TWEEDY: Ovarian Cyst removed by Cœliotomy.

BOMBAY MEDICAL AND PHYSICAL SOCIETY.

Adjourned Discussion on Plague Experiences at Hubli.

A MEETING of this society was held in the University Hall on March 25th, Surgeon-Lieutenant-Colonel J. W. CLARKSON being in the chair.

The adjourned discussion on Surgeon-Captain C. H. L. Meyer's paper on Plague Experiences at Hubli, of which an abstract appeared in THE LANCET of April 2nd, p. 936, was resumed.

Surgeon-Captain J. B. SMITH, acting civil surgeon, Poonah, sent some remarks, read by the Secretary, in which a comparison was drawn between Hubli and the village of Karad in the Satara district. The circumstances of the two places were very different. In Hubli there were 35 cases all told; in Karad the week before Surgeon-Captain Smith went to it there were over 35 cases a day. In Hubli the people affected were railway employés and were under considerable control; the people at Karad were subject to a punitive police post owing to a threatened attack on the assistant collector. In Hubli dry weather accommodation had only to be found for 1200 people, close to a line of railway; in Karad, four miles from the railway, with an unbridged river in flood between, monsoon—i.e., rainy season—accommodation would have had to be provided for at least 6000 people. Evacuation of the houses seems to be the only real remedy for plague in the villages but it is practically impossible during the rains.

Staff Surgeon BASSETT SMITH said that on two occasions a single case among the natives was attacked in the *Tenasserim*, one in each epidemic. They were quickly removed to hospital and the part of the ship was well scrubbed with disinfectants. On neither occasion was there any spread of the disease.

Dr. N. N. KATRAK, a sanitary member of the Bombay Municipal Corporation, said that measures of detention, quarantine, and segregation were always difficult of application, even in the beginning and in small places, but were almost impossible in such a large city as Bombay, especially when plague was extensively prevalent. He considered that rats were the chief if not the sole propagators of plague.

Dr. PEARSE said that the records show that not more than 5 per cent., and probably very much less, of those exposed to the contagion of a case of plague contract the disease, which seems to indicate that measures must be adopted to destroy the contagion from other sources than that from one individual to another.

Dr. ISMAIL JAN MAHOMED said he had noticed the recrudescence of plague in houses which were thoroughly disinfected and he thought this was due to the incoming tenants bringing with them dirty linen which infects the rats and then the rats spread the disease.

Surgeon-Major H. P. DIMMOCK, who spoke at considerable length, said that (1) the people should be removed from insanitary and unhealthy quarters; (2) the sick should be treated in hospitals; (3) those who had been in contact with the sick should be placed in segregation quarters for a certain time; (4) the clothes and belongings of the sick should be disinfected; and (5) the infected houses must be disinfected and allowed to stand empty for a considerable time. In a city it is difficult to carry out such measures even if the citizens honestly coöperate, and in Bombay, where they are largely hostile, the difficulties are enormous. He did not think that the epidemic was spread by rats so much as was imagined.

The further discussion was postponed till the next meeting.

Reviews and Notices of Books.

The Medical Examination for Life Assurance. By F. DE HAVILLAND HALL, M.D., F.R.C.P.Lond. Bristol: John Wright and Co. 1898. Price 2*s.* 6*d.* net.

THIS volume contains much that is sensible and practical in the way of advice as to the formation of a correct judgment upon the prospects of life of individuals presenting themselves for insurance. The medical examiner has often a difficult task to perform in estimating aright the importance of factors in the family history, in the previous health-condition of the applicant, his state at the time of application and his manner of life and occupation. It is not humanly possible to forecast with accuracy the vitality of any individual, but there are considerations under each of these heads which are clearly expounded by the author that should lead to the rejection or the "loading" of the application. Dr. de Havilland Hall exercises a wise caution in his recommendations, especially in regard to the subject of family tendencies, which certainly go for a great deal in estimating the chances of life. Speaking of "albuminuria," he considers that at present too little is known of the after-history of cases of "functional albuminuria" to render it safe for the examiner "to recommend for assurance any applicant whose urine contains albumin." However, a few lines further he somewhat modifies this view, for he says that if the subject is otherwise normal and free from a family history of Bright's disease and the urine is still found to be albuminous after a postponement of from three to six months, then "a further period of probation might be suggested or the applicant might be granted an endowment policy payable at fifty or fifty-five, an addition of about ten years being made." There are some judicious remarks upon the selection of an office, particularly addressed to medical men, whose profession renders it especially incumbent on them to take the opportunity of assuring themselves on embarking on their career in life.

Diseases of Women: A Clinical Guide to their Diagnosis and Treatment. By GEORGE ERNEST HERMAN, M.B., F.R.C.P. Lond., Obstetric Physician to, and Lecturer on Midwifery at, the London Hospital, &c. London: Cassell and Co., Limited. 1898. Price 25*s.*

THIS work is dedicated to the memory of Matthews Duncan and the equally remarkable man, Henry Gawen Sutton who was lecturer on pathology at the London Hospital and whose teachings must have greatly assisted in moulding the views of the writer of this volume who was a student at that school. A similar scientific spirit pervades the pages of his book to that manifested in Duncan's and Sutton's works—the same attempt to base practice on knowledge and scientific certainty and not on pure empiricism which unfortunately even at the present day is common in the treatment of the diseases of women and which has too long dominated this department. Dr. Herman's book is unique in this field, being neither a systematic textbook nor a volume of clinical lectures, but a "clinical guide" to the diagnosis and right treatment of the diseases of women. The sixty-three chapters of which the work consists are grouped into eleven parts not with any definite attempt at systematic arrangement, but rather in accordance with his clinical experience. He broadly divides the diseases peculiar to women into major and minor gynæcology. In the treatment of the former group surgical knowledge is especially necessary, whereas in the minor class the difficulties are medical and include "the treatment of slight ailments which interfere with the patient's comfort, but if she has fortitude to disregard this, neither impair health nor endanger life." Not being hampered by a too methodical arrangement of the work the author in the first seven chapters deals with subjects many of which are of general interest to the profession. Thus, in reference to the necessary training for the proper performance of surgical gynæcology he says: "The system at many of our hospitals by which the operations are in the hands of the seniors, and the juniors during the years most precious for the acquisition of manual dexterity are kept to seeing out-patients, is a bad one. It would be better for the seniors to see the out-patients and the juniors to do the operations." Would Dr. Herman support such a radical change in hospital organisation? The chapters on Neurasthenia, Hysteria, and Headaches may be studied with advantage by all practitioners, the discussion of the various forms of headache being worthy of one devoting himself particularly to the study of the nervous system and containing some caustic criticisms; thus in speaking of the supposed reflex effects of uterine diseases Dr. Herman says: "There have been publications—I trust now out of date—in which uterine paralysis, uterine cough, ovarian dyspnœa, &c., have been written about. The uterus and ovaries have been maltreated to cure these maladies. Such things cannot now be seriously discussed. They only mean that a patient with some organic disease has had the misfortune to meet with an incompetent doctor." The enumeration of the signs and symptoms and the differential diagnosis of uterine and ovarian tumours is clear and very methodical and the directions for the performance of major operations are precise and may be safely followed. Dr. Herman's surgical principles are quite up to date, but fortunately he does not support those who advocate the removal of all fibroid tumours as soon as discovered. The volume contains 252 illustrations, most of them being derived from the usual sources. A few are far from satisfactory, as one on page 481 "of a patient of the author's," in which the anatomy of the external genitals has been quite disregarded by the draughtsman. This work is no mean addition to our English medical library and is sure to prove helpful, not only to advanced students who have already acquired a knowledge of the elements of gynæcology, but to general practitioners and as a book of reference to those who devote themselves to this branch of practice.

Pathological Technique. By Dr. FRANK BURR MALLORY, Assistant Professor of Pathology, Harvard University Medical School; and Dr. JAMES H. WRIGHT, Director of the Laboratory of the Massachusetts General Hospital. London: The Rebman Publishing Company, Limited. 1898. Pp. 397. Price 14*s.*

THIS work is intended to be a practical manual for the Pathological Laboratory. Most books of the kind in addition to a description of the various methods employed in such a laboratory contain the clinical or pathological deductions which may be made from the examinations. Such a plan has its advantages and disadvantages. In the work now under consideration a sort of compromise is made.

Part I. contains good and detailed instructions as to the making of post-mortem examinations. Some of the processes described are rather old-fashioned, but as a whole the student will derive many useful hints from a perusal of the first seventy pages of the book.

Part II. deals with Bacteriological Examinations. Not only are the methods for making culture media and the methods of studying bacteria fully explained, but excellent descriptions are given of the various forms of micro-organisms and numerous illustrations are distributed throughout the text. The great majority of these are borrowed from other authors, but are none the less valuable on that account.

Histological Methods are fully detailed in Part III. The

processes are clearly described and there should be no difficulty in following out the instructions given.

We can cordially recommend the work as a useful handbook for the laboratory, but nothing more. In order to learn the results which may be obtained from clinical and pathological observations we must search elsewhere.

Respiratory Exercises in the Treatment of Disease. By HARRY CAMPBELL, M.D., F.R.C.P. Lond. London: Baillière, Tindall, and Cox. 1898. Pp. 200. Demy 8vo. Price 7*s.* 6*d.*

THIS, like the author's other works, is characterised by independence of thought and opinion based on sound physiological principles to which reference is often made in the course of the argument. The present volume is, so to speak, a forerunner of a larger and more special one on the mechanical treatment of heart disease, a subject which has long engaged the author's attention; in fact, we gather from the preface that this form of treatment has occupied his thoughts since the commencement of his medical career and that he has found himself somewhat forestalled by the Nauheim school. The present volume is therefore somewhat of a preliminary contribution and is concerned rather with general considerations. In the first place it clears the ground by dealing at length with the physiological problems of respiration, then describes the various kinds of breathing exercises, and in conclusion treats more briefly of their practical application in various diseases.

The more interesting parts are those describing the breathing exercises and their therapeutic uses. Under the heading of preliminary exercises the patient is directed to learn to dissociate costal and abdominal breathing, since each produces its own peculiar effects. Active breathing exercises are described and directions for combining them with active exercises for the arms are given. By developing the lungs and chest respiratory exercises may prevent the onset of pulmonary disease or exert a beneficial influence on its course. With regard to the treatment of heart disease by respiratory exercises the author is rather brief, as he proposes to deal with it at length in a separate work which the reader of the present volume will await with interest.

BRITISH BALNEOLOGICAL AND CLIMATOLOGICAL SOCIETY.—A meeting of this society was held at 20, Hanover-square on April 27th, Dr. W. V. Snow being in the chair.—Dr. William Bain read a paper entitled "The Action of Certain Drugs and Mineral Waters on the Secretion and Composition of Human Bile: an Experimental Investigation," after which Dr. A. P. Luff, Dr. Solly, and Dr. Hobhouse made some remarks and Dr. Bain briefly replied.—Dr. Edmund Hobhouse then read a paper on Gout and Rheumatism in Relation to the Seashore and Salt-water Baths, in which he said that it seemed doubtful whether sea air in itself had any direct effect apart from the question of soil and general meteorological conditions. Season also is an important subject, for the seaside is drier and more free from fogs than the country during the autumn and winter, but more windy in the spring. Statistics seem to show that the sea has little influence on acute and subacute rheumatism, but generally speaking marine climates are not indicated in rheumatic affections, although patients weak and anæmic after acute attacks may be greatly benefited. Gouty patients with any active symptoms are better away from the sea. Salt-water baths are unquestionably of great value, especially in subacute rheumatism, but the question is whether their value is due to the heat or the salt—probably chiefly to the latter.—Dr. Archibald Garrod, Dr. Luff, Mr. Hamilton Cumming, Dr. Street, Dr. Hyde, Dr. Tyson, Dr. Solly, Dr. Ward-Humphreys, Mr. Bowen Davies, and Dr. Symes Thompson took part in the subsequent discussion.

Analytical Records
FROM
THE LANCET LABORATORY.

BYNO-PHOSPHATES.

(ALLEN AND HANBURYS, PLOUGH-COURT, LOMBARD-STREET, E.C.)

THE improvement in this preparation is evident. It consists simply of the replacement of the sugar in the ordinary preparations of chemical food by an active fluid malt. Whilst the phosphates of iron, lime, potash, and soda are preserved unimpaired the menstruum is not only itself nutritious but an aid to digestion. Preparations loaded with sugar are frequently inadmissible.

HYDROXYL-FREE COD-LIVER OIL.

(PETER MÖLLER, 43, SNOW-HILL, E.C.)

We have already shown how the elimination of hydroxyl by Mr. Möller's process of preparation renders cod-liver oil free from the decided drawback of "repeating" or giving rise to eructation. We have recently tested both chemically and practically a sample of the new season's oil (1898) with satisfactory results. The oil is remarkably bright and clear and practically tasteless and free from unpleasant effect after ingestion.

(1) EXTRACT OF BEEF; AND (2) FLUID BEEF.

(LIPTON'S, LTD., CITY-ROAD, E.C.)

The difference in composition between these two excellent preparations will be seen from the following results of analysis: extract of beef: moisture, 18·64 per cent.; organic matters, 61·38 per cent.; and salts, 19·98 per cent. The organic matters presented the following composition: peptone, &c., 30·27 per cent.; albumins, 1·00 per cent.; and extractives, 30·11 per cent. The preparation is obviously highly concentrated and is according to these results a powerful nutrient as well as stimulant. The nourishing constituents occur in practically the same proportion as the stimulating beef extractives. The flavour is pleasantly beefy but somewhat excessively spicy. It is evidently concentrated with care, for there was no indication of burnt flavour. The fluid beef gave the following results: moisture, 42·91 per cent.; organic matter, 40·83 per cent.; and salts, 16·26 per cent. The organic matter contained albumin and fibrin, 6·87 per cent.; peptones, &c., 15·26 per cent.; and beef extractives, 18·70 per cent. The preparation affords a pleasant and satisfactory beef-tea including the albumin and tissue of muscle. According to analysis it contains all that is necessary to sustain the vital processes. Both preparations were found to be free from objectionable preservatives.

TOILET, ANTISEPTIC, AND MEDICATED SOAPS.

(EDWARD COOK AND CO., SOAP WORKS, BOW.)

Soap is itself mildly antiseptic, but its value in this direction by the addition of well-known antiseptic agents is decidedly increased so long as they are compatible. This at any rate is the case with the following soaps which we have examined from the above makers: "camphor, rosemary and borax," "compressed coal tar," and "Cambath." The latter is very agreeable to use. Sulphur and glycerine soap is a very useful combination for the skin. Amongst the specimens also was one called "violet savon de luxe," which is a very excellent toilet soap of well-balanced composition and free from alkali, irritants, and resins. Lastly, we have examined a specimen of hygienic tooth soap which appears to be well adapted as a dentifrice. It is cleansing and neutral and contains a mild antiseptic which we had no difficulty in recognising.

INVALID FRUMENTINE.

(WILLIAM HAY, LIMITED, GROSVENOR-STREET FLOUR MILLS, HULL.)

The microscopic examination of this food indicates that a wise selection has been made of the most nourishing portions of cereals in its preparation. It contains an excellent proportion respectively of nitrogenous, carbonaceous, and mineral matters. Moreover, its flavour is particularly satisfactory, being of a rich, nutty, and malty character. It contains a notable proportion of the germ of wheat. An additional advantage from the dietetic point of view consists in the fact that the nutritive constituents occur abundantly in a soluble condition. The preparation is a decided advance on many farinaceous compounds which at their best consist merely of highly-baked flour.

MEAT AND MALT WINE.

(JOHN RILEY, PENDLETON, MANCHESTER.)

The examination of this wine gave the following results: total solid matters, 11·72 per cent.; mineral matter (containing phosphates), 0·53 per cent.; alcohol, by weight 16·46 per cent., by volume 20·24, equal to proof spirit 35·47 per cent. The amount of nitrogen proved to be 0·167 per cent., which is equal to 8·9 per cent. of albuminoids in the extract. The wine is thus obviously a genuine meat and malt wine, but as we have pointed out before wines of this class possess very little direct nutritive value since the nutrient constituents of beef are not soluble in wine of moderately high alcoholic strength. The wine employed in the present instance is a port of satisfactory character judging from the good flavour of the preparation.

EXTRAIT CANNABIS.

(E. RISSENHARDT, 47, CAMPDEN HOUSE, PEEL-STREET, KENSINGTON, W.)

This preparation of hemp-seed extract would appear to deserve some attention since abroad it is said to have given encouraging results as a nutritive in wasting diseases. It has, in particular, been tried in pulmonary diseases with the result, it is stated, of an increase in the weight of the patient. We have confirmed the analysis published by Dr. Spiegel of the University of Berlin. It consists approximately of one-half starch and one-third albumin, the remainder being made of 8 per cent. of fat, 1 per cent. of mineral matter, and 10 per cent. of moisture. It is prepared for administration by adding a tablespoonful to a pint of fresh milk, which is then boiled until the extract is quite pulpy.

"HIGHLY NOURISHING" STOUT.

(C. VAUX AND SONS, CASTLE-STREET, SUNDERLAND.)

In the brewing of this stout it is said that by paying greater attention to the operation of mashing an increased proportion of nutritive substances appears in the wort and hence in the stout. The results of our examination confirmed this statement. At the same time the stout is free from acidity and is yet of a ripe character. The extract amounted to 8·02 per cent. and the mineral matter to 0·33 per cent. On distillation the stout proved to contain 5·25 per cent. by weight of alcohol or 6·55 per cent. by volume, equal to 11·49 per cent. of proof spirit. As is well known, stout appears to be easier of digestion than beer, and doubtless in the present case this is particularly so, since the digestive action of malt has been pushed in the process of production to a maximum degree.

HYDROBROMATE CACHETS.

FLETCHER, FLETCHER, AND CO., HOLLOWAY, N.)

The value of the hydrobromate combinations of quinine and iron is now well recognised. Recently they have been prepared in a new form for administration which offers decided advantages. This new form is the cachet, which contains a greenish powder soluble in water, forming a pale green solution. On examination this solution is found to contain the iron in the unoxidised condition—that is, as ferrous bromide. Each cachet contains two grains of hydrobromate of iron and one grain of hydrobromate of quinine. We have examined also a cachet containing in addition $\frac{1}{24}$ gr. strychnine. The cachets obviate the drawbacks to the administration of hydrobromates in liquid form, while quinine and iron thus combined do not give rise to cinchonism or gastric disturbance as with ordinary preparations of iron and quinine.

"RISO" SELF-RAISING FLOUR.

(HENRY ROBERTS AND SON, ALUN FLOUR MILLS, MOLD.)

We have examined this flour analytically and practically. It is a flour of excellent quality which yields a small quantity of gas on moistening and heating. It is free from alum. In practice its raising power is not so brisk as it might be, the bread produced being somewhat heavy and yellowish in colour. It is decidedly better for making cakes.

New Inventions

APPARATUS FOR THE TREATMENT OF TALIPES.

NEGLECTED cases of talipes may in course of time undergo so much consolidation and fixation as to be hardly capable of replacement in the natural position by means of the ordinary forms of orthopædic apparatus, and I have found the wrench which is shown in the accompanying illustration to be of

considerable service in suitable cases. The wrench is made in two forms; the principle is the same in both, the essential difference being that modifications are introduced to adapt the one for the treatment of obstinate talipes equinus, while the other is similarly applicable to talipes varus. Messrs. Arnold and Sons, Smithfield, E.C., are the makers.

Mandeville-place, Manchester-square, W. HENRY F. BAKER.

A NEW GLASS TANK FOR SURGICAL DRESSINGS.

THESE tanks, a specimen of which is shown in the accompanying illustration, are made of glass and have a tightly fitting metal lid. They are of the same diameter at the mouth as at the base, and being transparent it is possible at a glance to see if stock is getting low. They are made in different sizes, a most useful one being 8in. by 6in. by 4in. which is sold for half-a-crown. The manufacturers are Messrs. Reynolds and Branson of Leeds.

THE LANCET.

LONDON: SATURDAY, MAY 21, 1898.

THE unexpectedly early conclusion of the second reading stage of the Vaccination Bill and its reference to the Grand Committee on Law bring it to the crucial part of its passage through Parliament. If it is to be seriously added to or amended the work must be done by this committee, as the report stage is not likely to see the introduction of any important changes, the power of the Government both in the House of Commons and the House of Lords being practically supreme. If Mr. CHAPLIN has been taking note of the views of the medical profession on the Bill he cannot but have been struck by the fact that divergence of opinion has been comparatively trifling and has referred mainly to less important points, while as to essential principles there has been a very near approach to unanimity. On one question there is, we venture to say, such a consensus of view as is rarely to be found in a profession numbering thirty thousand members proverbially alleged to be apt to differ. That question is the inclusion in the Bill of a provision for revaccination. The Epidemiological Society, the British Medical Association, and the Jenner Society have alike given prominence to this requirement. Even more notable perhaps is the action of the medical officers of health. In face of the continually repeated asseverations by anti-vaccinationists that sanitation without vaccination is capable of preventing small-pox it is a significant fact that the body of men whose special work it is to develop sanitation and whose interests are bound up in the public recognition of the value of sanitation have publicly confessed that the only effective means of preventing and controlling small-pox consists not in sanitation, but in vaccination and revaccination systematically performed. This declaration was signed by some 1100 or more medical officers of health before any Bill was brought forward, and now in presence of the Bill the council of the Incorporated Society of Medical Officers of Health has memorialised the Government regarding these and other points and has offered to send a deputation to Mr. CHAPLIN to support their views.

It seems to us that Mr. CHAPLIN and the Government will be incurring a very serious responsibility if they give no heed to this great body of skilled opinion on the subject of their present legislation. The conclusions at which the medical profession have arrived are based not on *a priori* considerations but on abundant and world-wide experience. The great national experiment which has been carried on in Germany for nearly a quarter of a century has demonstrated the fact that a State can control small-pox by means of vaccination and revaccination even if it be surrounded by other States which are more or less neglectful of the Jennerian prophylaxis and as a result are continually introducing the variolous infection within the German boundaries. In our own country, on a much smaller scale, similar experiments are being constantly made with a similar result. In the postal and constabulary services whenever a local epidemic of small-pox takes place evidence is furnished that these bodies of men specially exposed to infection are yet specially protected from infection and the only adequate explanation of their differentiation from the rest of the population is to be found in their systematic revaccination. In large workshops, with many employés, revaccination at once shows its power in stopping an outbreak, as it did in the Bewsey Ironworks at Warrington.[1] In the Army and Navy, in spite of the comparatively low standard of operative success attained there, an enormous diminution in small-pox prevalence has followed the general use of revaccination, and in our small-pox hospitals the revaccinated nurses dwell and work unharmed in the midst of a living fire of variolous infection.

While we refer to the example of Germany it is to be clearly understood that we do so with a difference. In Germany there is systematic vaccination and revaccination and there is also strong compulsion with regard to vaccination and revaccination. As a profession it is our duty to tell the State how it may prevent and control small-pox; but assuming that the State accepts our teaching as to the value of the preventive means it is then primarily the duty of the State itself to decide how the prophylaxis which we advocate and which the State adopts shall be applied. The Legislature must look not merely to the value of vaccination but to the condition of public feeling on the subject and to the principles which guide the making of laws in a democratic country. Every individual in the realm ought to be vaccinated and revaccinated and the State should provide the means and should use all reasonable legislative pressure and influence towards this being done, but how far it should resort to actual compulsion or physical force is a question in which medical men are interested rather as units in the body politic than as a profession. Our position, therefore, is this, and we hold it to be unassailable, that primary vaccination and revaccination being both necessary for the prevention of small-pox, both alike ought to be legislated for, and that it will be a huge blunder on the part of any Government to make a new vaccination law and to omit from it all provision for the systematic maintenance and encouragement of national revaccination.

THE recent action of the General Medical Council in regard to the employment of unqualified assistants will probably be challenged at the approaching meeting. It is not likely to be seriously modified in the sense of giving a new lease to the old practice of doing a great part of the work of medical practice with the help of unqualified assistants. There, doubtless, is a proportion of unqualified assistants who have practically completed their curriculum and whose

[1] See Dr. Savill's Report to the Royal Commission on the Warrington Epidemic.

non-qualification is an accident or a misfortune for which they are to be sincerely pitied. And possibly the General Medical Council may consider that their case is entitled to some special consideration at the hands of the medical authorities. Be this as it may, it is evident that in the future much of the work now, or till lately, done by unqualified assistants will have to be done by men recently qualified. It is of great moment under these circumstances that these men should be encouraged and advised by their teachers to take an opportunity of seeing all they can of private practice during their curriculum. There is undoubtedly something in the complaint of general practitioners who employ assistants that the unqualified assistant is more useful to them than the qualified. This remark is made too frequently and with too much obvious feeling to be altogether disregarded. It is too apparent to be disputed. The unqualified assistant has been in private practice nearly all his days and it has been a kind of education to him. He has probably seen every variety of it—the good practice, the cheap practice, the branch practice, and the practice with innumerable clubs attached to it. He is familiar with dispensing and the ready use of ordinary drugs and their doses, perhaps too familiar. The common diseases are easily recognised by him. He has besides, and not altogether to his discredit, if not an interest in the business aspect of practice, no aversion to it or to taking his fair share in the attention which it requires. All this will have to be recognised by the qualified men who are to do the work of the present unqualified assistants and should be recognised by their teachers. If it is not so recognised much inconvenience will be felt in the near future by a very large class of practitioners who have to conduct practice on a large scale for small rates of remuneration or over awkward areas of country.

The General Medical Council has already to some extent recognised the importance of this element in medical education. Soon after the introduction of Direct Representatives into the Council by the Act of 1886 the defects of the curriculum in this respect were pointed out, chiefly by the Direct Representatives themselves. They showed that in the examinations at least there was a conspicuous absence of tests of the knowledge of common diseases, and they were well supported in this course by such men as the late Sir WILLIAM GULL, Sir SAMUEL WILKS (then Dr. WILKS), and others. It was natural that the Direct Representatives should insist on such defects in medical education, as they represented so largely the general practitioners of the country as distinguished from its consultants. The Council adopted their views but with a certain reluctance. The Council is made up predominantly of medical teachers or the representatives of teaching and examining bodies. They understand little of education apart from a medical school or a large hospital—perhaps naturally so. And though they conceded in their regulations that six months of the last year of study might be spent in pupilage to a practitioner they have never insisted that such a pupilage should be compulsory. Fortunately the late Notice concerning the employment of assistants recognises this regulation of the General Medical Council and does "not apply so as to restrict the proper training and instruction of *bonâ fide* medical students as pupils."

One way out of the difficulty in which busy practitioners find themselves, owing to their being deprived suddenly of the power to employ unqualified assistants, is to encourage this education in general practice which was contemplated by those who urged the Council to require some time to be spent under the supervision of a practitioner who had the means of teaching. The Council can do much in this way to mitigate the inconvenience which it is alleged has been caused by the recent Notice and which otherwise is likely to extend over several years. Some would go so far as to insist on such an education in practice being required from every man before he becomes qualified, but we question if such compulsion is altogether advisable, although much may be said for it. It has drawbacks as well as advantages. The old race of practitioners had very little other education, and among the eminent leaders of the profession now living there are few into whose education such an element did not enter and who would not now maintain that it was one of the most valuable parts of their training. The education of lawyers has been almost entirely, and is still largely, the mere education of practice and constant contact with legal work and cases. No doubt in their profession the systematic teaching of law and the principles of law has been defective and needs to be improved, but in medical education it is the reverse. We could do with a little more contact with cases in their every-day occurrence and aspect; and it is not improbable that one result of the recent action of the General Medical Council will be to provide a remedy for this very defect. The Council is not a mere academic body. As a Council it has none of the exclusive interests of a mere examining body or a teaching body or, as in the case of a university, of both. It has to recognise the great business of medical practice in every part of the country and in every kind of population and to train a profession familiar with disease in its practical points and capable of rendering to those who suffer from it ready and effective help.

ATTENTIVE readers of the medical journals may make a pretty good forecast of the nature of the business which is likely to occupy the time of the General Medical Council when it holds its sixty-fifth session, which will commence on Tuesday next at 2 o'clock, especially if they also study the Council's minutes and those of its Executive Committee. A recent communication seems to show—for we have not yet all the facts before us—the chance of a somewhat sharp passage of arms between Mr. VICTOR HORSLEY and the new President as to the right of members of the Council to have access to the documents and records of the Council whenever they please. Both are strong men, having had considerable experience of business as well as of science, and both must be credited with jealousy for the reputation of the Council as a business body as well as one representative of the most liberal of the professions. The question raised by Mr. HORSLEY is very important and seems to us to be very easy of solution. The difficulty

will be to ascertain how it is that so simple a question can be a cause of heat or friction between two members of the Council who are so distinguished and who might be thought capable of settling much more difficult ones with ease.

To pass to other and more agreeable matters, there are two subjects on which the Council will not have much more to say at this or, we trust, any subsequent meeting and in regard to which it may fairly be congratulated on its action. We refer to the question of foreign practitioners, largely English, practising in Italy, and the subject of the true principles that should be the basis of any legislation on the subject of midwives. We mention these subjects here only to offer our own acknowledgment of the good work done by the Council. The representations of the Council supported by the Foreign Secretary have sufficed to elicit from the Government of Italy the declaration that it is no longer their intention to legislate in a sense unfriendly to those practising in Italy without the sanction of Italian degrees. The effective action of the Council in arresting, by its representations to the Government, the progress of the Midwives Registration Bill, which would have left the Gamps very much where they are and which, moreover, had the almost unanimous disapproval of the medical profession, is a matter of too recent history to need further mention here.

The question of defects in preliminary education is likely to be again brought before the Council in two ways. The Chairman of the Examination Committee is expected to give the results of a correspondence with the Director of the Medical Department of the Army, who in his last valuable returns expressed himself unable to give the Council information as to the Preliminary Examining Body which had passed candidates showing great deficiency in general education. It is greatly to be regretted that he could not give the information asked for, for this is one of the chief means by which the Council can identify the bodies whose examinations are faulty and it is hoped that Sir DYCE DUCKWORTH will be able to induce the Director of the Army Medical Department to afford similar information to that which the Director of the Navy Medical Department supplies. But the question of the efficiency of the preliminary examinations recognised by the Council will be raised in a broader and more searching manner. It is understood that the College of Preceptors feel aggrieved at the reflection thrown on the examination for their second-class certificate and that the whole question of the standard of this examination, as compared with other examinations of a similar standard which are still recognised, will be raised. Our readers will remember that the members of the Council seemed to doubt whether they were not acting in a halting way in the somewhat timid course which they took. The subject will doubtless be further elucidated at the approaching meeting.

Another question of interest which may be expected to be raised again is that of the extinction of the class of unqualified assistants, but this very important matter is treated in another column. It is to be hoped that the President of the Council will be able to give some good account of his action in the way of securing an interview with the President of the Local Government Board concerning the very loose manner in which death or burial certificates can be obtained.

The question of the Disciplinary Powers of the examining bodies is emphasised every day by one case or another and it will be disappointing if some progress is not reported on the part of these bodies. They cannot be too often reminded that they owe to their diplomates the friendly correction of errors of conduct at an early stage when a word of suggestion would avert greater errors which bring men under the risk of being charged with infamous conduct in a professional respect. Apart from the actual programme of business, which, of course, we have not seen, there are other subjects of great interest, the further discussion of which may be expected, including Mr. TEALE'S views of excessive and superfluous examinations. We have said nothing of Penal cases, but we have said enough to show that the Council has work to do which will require its careful consideration and the best use of its time.

Annotations.

"Ne quid nimis."

THE PASSING OF A GREAT MAN.

WE do not intend to give any detailed obituary notice of the great man who has just passed from among us. Our readers have before them the ample story of Mr. Gladstone's grand career in all the daily papers and in most cases it will be the province of such papers to discuss political matters upon which we are unable as a medical journal to take a view. But at the same time we desire to register our feelings of profound admiration for the dead statesman's lofty ideals, unrivalled intellectual powers, and wonderfully sweet and buoyant temperament. In Mr. Gladstone a lowly trust in God was joined to the highest aspirations for the good of humanity, and the sense of the loss which the nation feels itself to have sustained by his death cannot be adequately expressed. Medicine, its science and practice, falls as a part of the social scheme beneath the domination of a real national leader, so that in common with the rest of the community we rejoice when our leader is a good man as well as a great one, and while rejoicing benefit. It is unnecessary to point to special acts or speeches that we may prove Mr. Gladstone to have been the friend of those who follow our calling, though to do so would be easy. Being the man that he was it was inevitable that he should sympathise with us and with all who work to help the weak. For Mr. Gladstone was exactly "the man of mercy" whom the Son of Sirach has described, as he was and is, also, one "whose glory shall not be blotted out" but "whose name liveth to all generations."

"THE LIMITS OF PROFESSIONAL SECRECY."

MR. E. A. BARTON, in a letter under this title in our issue of May 7th stated a situation which has often caused difficulty to medical men, who will be grateful to him for having ventilated the subject. We are of opinion that in a general sense, if a medical practitioner is engaged by an employer to professionally attend an employé he ought not to divulge to such employer the nature of the illness of the patient. Of course he should exercise his discretion in the matter. There could be no harm done if the illness were of a

simple nature—simple, that is to say, as regards its bearings beyond its medical aspect. We can imagine circumstances which might render it wise and obligatory on the medical practitioner to inform the employer of the nature of the servant's ailment—e.g., in a case of infectious disease. We do not think an employé would recover damages from a medical man for making known his complaint, provided always that the facts could be substantiated and that they were communicated without malice. There could not be a valid contract between the employer (who pays for) and the attending practitioner except as to attendance and remuneration. It is no part of a medical man's duty to act as a secret police agent. We should advise him to inform the employer that he should consider any information he might obtain in his professional capacity as strictly private between himself and the patient and not to be divulged except with the free consent of the latter. We consider that secondary syphilis, for the purposes of the argument, should be classed as an "infectious disease," since through ignorance, negligence, or inadvertence it might be conveyed to other members of the household. Pregnancy or disease arising from alcoholism ought not to be divulged to the employer without the consent of the servant.

THE QUEEN'S VISIT TO NETLEY.

ON Saturday, May 14th, the Queen paid a second visit to the Royal Victoria Hospital, Netley, to inspect the invalids who have lately returned from the North-west frontier of India, to offer her sympathy to those who have lost health or been wounded in support of the nation's weal, and to decorate with the highest national reward those in hospital whose valour has of late been so conspicuous. Accompanied by Princess Christian, Princess Henry of Battenberg, and Princess Victoria of Schleswig-Holstein, and attended by the Duchess of Roxburghe, Major-General Sir John M'Neill, Major the Hon. H. C. Legge, and Lieutenant Ponsonby, Her Majesty travelled from Windsor *viâ* the Great Western and South-Western lines, and after a run of two hours arrived at the Netley station at half-past four o'clock. The afternoon was magnificent, the sun shining brilliantly. At the station the Queen was received by General Davis (commanding the Southern District), by Colonel Creagh (A.A.G. at Netley), and Major Sumner, A.D.C. The Earl of Northbrook (Lord-Lieutenant of the county) was also present, accompanied by his daughter, Lady Emma Crichton, and her husband, Brigadier-General the Hon. Henry Crichton, commanding the Portsmouth Brigade of Volunteers. The boys of the training ship *Mercury* formed a guard of honour at the station and as the Royal carriage passed Her Majesty was saluted and the band played the National Anthem. The road from the station to the hospital was densely packed with spectators and the Queen received an enthusiastic greeting. Her Majesty arrived at the entrance to the hospital at ten minutes to five o'clock and was there joined by Prince Maurice of Battenberg who had been driven over from Lyndhurst with his tutor. The guard of honour at the hospital was supplied by the East Lancashire Regiment, whilst the Northumberland Fusiliers kept order in the grounds. Under the portico the Queen was received by Surgeon-Major-General Nash, P.M.O. of Netley, and presented with a beautiful bouquet by Miss Stevenson, the daughter of Surgeon-Colonel W. F. Stevenson, Professor of Surgery in the Army Medical School. The following officers were presented to the Queen by Surgeon-Major-General Nash: Surgeon-Colonel J. Lane Notter (Professor of Hygiene), Surgeon-Colonel W. F. Stevenson (Professor of Surgery), Surgeon-Colonel K. Macleod (Professor of Medicine), Brigade-Surgeon-Lieutenant-Colonel Blennerhassett, C.M.G., Brigade-Surgeon-Lieutenant-Colonel W. E. Webb, Surgeon-Lieutenant-Colonel W. L. Chester and Surgeon-Major W. Dick. Miss Norman, lady superintendent of nurses, was also introduced to the Queen, who proceeded in her chair along the lower corridor, passing a file of convalescents, to the lift, by which she was conveyed to the surgical division of the hospital. Here the Royal party visited the bedsides of the wounded, Her Majesty speaking words of kindly sympathy to every patient. The Queen went into nearly all the wards. In the corridor Piper Findlater of the Gordon Highlanders and Private Vickery of the Dorset Regiment were stationed; they were presented to Her Majesty and the impressive ceremony of pinning the Victoria Cross on the left breast of each was accomplished, the Queen commending them for their bravery and congratulating them on attaining the highest honour a British soldier can have conferred upon him. The tour of the surgical division over, the Royal party visited the medical division, the Queen seeing during her whole inspection nearly 900 patients. When Her Majesty again reached the lower corridors Lieutenant Pears of the Cameronians was presented to her, he being one of the officers who was wounded on the frontier; he has been under treatment for some weeks in the hospital for a bullet wound of the leg. It had been arranged that Her Majesty should leave Netley at half-past five o'clock, but at that hour the Queen had not completed her visit, and so as not to disappoint any patient she gave directions that the journey should be postponed for half an hour, by which time she had succeeded in accomplishing her mission of sympathy. At six o'clock the Queen entered her carriage, but before doing so she expressed to Surgeon-Major-General Nash her great satisfaction at all she had seen and with all the arrangements made for her. While Her Majesty was passing along the lower corridor Piper Findlater played "Haughs of Cromdale" on the pipes which have lately been presented to him. The Queen was looking exceedingly well and on emerging from the hospital showed considerably less fatigue than on the occasion of her former visit; she was enthusiastically cheered on leaving the hospital and all along the road to the South-Western railway-station.

TWICKENHAM AS A HEALTH-RESORT

A CORRESPONDENT writes: "Recently the contractor to the Twickenham Urban District Council for the removal of house refuse deposited many cartloads of the contents of 'dust'-bins on a piece of ground (which is being rapidly covered with houses) within 20 yards of the windows of my dwelling-house, and I called the attention of the medical officer of health and of the inspector of nuisances to the deposit and asked for an immediate removal of the nuisance created. An inspection of the filth revealed the usual contents of 'dust'-bins—decaying vegetation, fish offal, empty tins, bones, scrapings, &c.—and the stink from it was already plainly noticeable in my house. The medical officer replied stating that he had drawn the attention of the contractor to the nuisance and had instructed the inspector of nuisances to visit and report should any nuisance exist in the future. A few shovelfuls of earth—not sufficient to cover it up—were thrown on the filth, and I, not thinking this a sufficient 'abatement' of the nuisance, wrote again to the medical officer of health and urged him to order its complete removal. To this the officer replied stating that there was 'just cause for complaint' and that the contractor had 'undertaken to cover up with soil to the depth of 15 or 18 inches the whole of the refuse which had been shot at this spot, and that no more shall be shot there.' This covering up (which has not been done) I did not and do not deem satisfactory, and accordingly, under Section 106 of the Public Health Act, I asked the Local Government Board to order the removal of the filth. The receipt of my letter was duly acknowledged the next day, and a further communication was received seven days after, saying that the

Local Government Board had no power to interfere in the matter. I then went to the offices of the Local Government Board and was courteously received by one of the officials, who explained that although the Board had the power to interfere they never exercised that power and would not do so in particular cases: they would only do so where a sanitary authority generally neglected its duty. If the Board were to act in individual cases the staff of officials would require to be largely augmented. The Board could therefore only recommend me to apply to a magistrate to order the removal of the filth. I may mention that last summer a much larger quantity of house refuse was deposited on land in the street on the left hand side of me, with the result that, in addition to the stink arising, the whole neighbourhood was pestered with a plague of flies for many weeks. This same land is now covered with a front row of houses and more are being built!" Our correspondent now asks us to give him our opinion of the matter. If the facts are correctly stated by him we have no hesitation in saying that a serious breakdown in local government is revealed in this small matter. Firstly, the urban district council should know better than to dump stinking refuse within nose-range of the ratepayers. Secondly, it is illegal to build immediately upon such "foundations," and a watchful eye should be kept upon those responsible for the building operations now proceeding to see that they do not transgress the law. Thirdly, a covering of 18 in. of earth is not, when it is put there, a drastic measure for the abatement of the nuisance, though it would undoubtedly have a great remedying effect. As, however, we learn from our correspondent that eighteen days after the contractor had undertaken to cover up the filth masses of it still remained exposed, it is clear that the method of abatement has not received due trial. Fourthly, why did it take a week for the Local Government Board to find out that they had no powers—or, rather, no powers that they intended to exercise? Our recommendation to our correspondent is that he should take competent and unbiassed witnesses to the spot to support his statements if necessary and that he should apply to a magistrate for an order compelling the urban district council's contractor to remove the filth. This measure would possibly give more trouble than covering the mass over with soil, but we are certain that the able medical officer of health will agree with us that it is a surer method of abatement, while the fact that the contractor failed to do for so many days what he had undertaken to do encourages us in the view that if he is given a little trouble now it will do him no harm in the future. For he has certainly entailed much trouble on a fellow citizen. The story is not a good advertisement for the neighbourhood. If houses are being built at Twickenham on such foundations as our correspondent indicates, and if any inhabitant of Twickenham may wake up and find that the contents of other persons' ashpits, scullery pails, and middens have been added to his frontage, Twickenham will soon be known as a suburb to be severely avoided.

THE SMOKE NUISANCE: AN INTOLERABLE STATE OF THINGS.

IT is fortunate for Londoners that the present period of the year happens to be spring and not winter or late autumn, for the Welsh coal strike appears to have given opportunity to hotel and restaurant proprietors and others to commit a serious breach of hygienic law. The appearance of several of the great thoroughfares of the metropolis has for the last few weeks forcibly suggested the "black country." Never was London deluged in blacker smoke on all sides than it has been recently. The Strand in particular, that avenue of cafés, restaurants, and hotels, is a disgrace as it is a reproach to the public health authorities concerned. For the last few weeks this thoroughfare has been bathed in murk and gloom and the atmosphere has been offensive with sulphurous emanations and irritating smuts. The nuisance continues at the time of writing with unabated vigour and we possess a carefully kept record of the foul vomiting of several chimneys in the immediate vicinity of the offices of THE LANCET. It goes on, not for minutes, but for hours, and is not only a nuisance to health, but a source of considerable injury to property. The effect on buildings decorated with light colouring is disastrous and the paint everywhere rapidly assumes a deteriorated appearance. All endeavours to keep windows clean are utterly futile. And to open them is only to invite layer upon layer of soot to cover our books, papers, and manuscripts. Even at Westminster they have noticed it, for in answer to a question put by Mr. Labouchere in the House of Commons last week it was stated that the matter was one with which it was the business of the County Council to deal. The plea that the nuisance is caused through the difficulty of getting Welsh or comparatively smokeless coal is idle. The smokiest coal can be burnt without evolving dense or almost solid smoke by the adaptation of a suitable and simple smoke-consuming contrivance above the furnace. It is certain that if the meteorological conditions of winter had prevailed the smoke would have been locked in by particles of moisture and the worst possible kind of fog would have hung over the metropolis. It is the duty of the London County Council to set in motion the powers vested in them under the Public Health Act, containing, as it does, a clause which runs as follows: "Any chimney (not being the chimney of a private dwelling-house) sending forth black smoke *in such quantity* [the italics are ours] as to be a nuisance shall be deemed to be a nuisance liable to be dealt with summarily in a manner provided by this Act." Then why are the offenders not "dealt with summarily"? Since the above was written we are glad to record that as a result of the representations of many solicitors and others in Lincoln's Inn-fields proceedings were taken on the 18th inst. against the Metropolitan Electric Supply Company for having on twenty days allowed the chimneys of their works to emit black smoke in such quantities as to constitute a public nuisance. An order for the abatement of the nuisance was made by consent with £5 5*s.* costs on the first summons and 6*s.* on each of the nineteen others. We trust that this will lead to the suppression of the nuisance which continues to exist in a great many other places.

HOSPITAL ACCOMMODATION ON BOARD PASSENGER VESSELS.

THE rapid growth of public opinion in relation to matters sanitary, together with the increasing number of persons who for one or another reason "go down to the sea in ships," cannot fail to attract more and more attention to the sanitary condition under which the floating population lives. A considerable number of our port sanitary authorities have within recent years done excellent work in this direction, though there are, we regret to say, still some who have contributed next to nothing towards the general well-being of the sailor's existence. In matters of construction, however, the powers of port sanitary authorities are somewhat limited, and a badly arranged vessel is not likely in practice to be much modified by any powers which they possess. In a word there is at present no proper guarantee that a vessel will be constructed with due regard to the health and comfort of those who may from time to time occupy her. What we really need, but are not likely at present to obtain, is that

the plans of proposed vessels shall be submitted to some authority or authorities capable of advising, and to a certain extent of insisting, upon adequate ventilation, drainage, and cleansing arrangements together with a proper provision of hospital and lavatory accommodation. Pending the advent of this machinery port medical officers of health may exercise no little influence on the construction of ships in the future by drawing public attention to the bad arrangements obtaining on existing vessels and pointing out how such defects may be obviated. We are glad to see that Mr. Wellesley Harris, the medical officer of health of the borough and port of Southampton, has taken this view of the situation and that in his current report he gives an account of the hospital accommodation of 23 passenger vessels frequenting that port. Neither the names nor the tonnage of the vessels in question are furnished, but having regard to the fact that not a few of the finest liners afloat arrive and depart from Southampton we may reasonably conclude that Mr. Harris's observations have reference to some of the largest shipping companies in existence. The results of the inspection are arranged in tabular form in the report, and it is at once apparent that much reform is needed; for instance, in a vessel carrying no less than 1230 of passengers and crew there is but *one* hospital with five beds, and although in relation to the total number of persons carried this gives one hospital bed to 246 persons, it is clear that in actual practice, there being no separate accommodation for each sex, or presumably for the crew, nothing approaching this ratio really obtains. We are told, too, that the door of the hospital opens into the third-class dining saloon and that there is a water-closet in the hospital separated from the rest of the interior by a wooden partition. Clearly, as Mr. Harris remarks, this hospital is useless as a means of isolation. There are several other vessels on the list to which comments similar to the foregoing would apply, but on the other hand we note five vessels, carrying, all told, from 940 to 2450 persons each, where the hospitals are regarded as "very satisfactory for all purposes." In summing up the hospital question Mr. Harris thinks that much reform is necessary as regards the situation, cubic capacity and ventilation, and the proportion of baths to crew and passengers. He thinks that well aft on the poop deck is the best place for ships' hospitals, and in large passenger liners, despite the proximity of the propeller and the range of motion there experienced, this view is on the whole a sound one. Of course, the main issue from the view-point of preventive medicine is that the hospital, which perhaps as a rule is used for non-infectious cases, can be used with safety for infectious diseases when necessary; but at the same time we must have due regard to the comfort of the invalids and to the accessibility of the hospital during monsoons, &c. Mr. Harris has done well to draw attention in his report to hospital accommodation afloat, and although the public can hardly be expected to render much assistance they may bring into operation the laws of supply and demand by showing a preference for such vessels as are properly equipped in this particular.

SEDENTARY EMPLOYMENTS.

VERY little observation will suffice to convince anyone of the difference which exists between those who follow sedentary, and those engaged in outdoor, occupations as far as their physical appearance goes. The city clerk, the employés in shops, and those who follow sedentary occupations, whether male or female, do not usually present anything like the healthy appearance, nor have they the colouring, the healthy facial expression, or the robust aspect and upstanding carriage, of those who live in the country or at the seaside, or of those who follow an out-of-doors life and take sufficient physical exercise. But making every allowance for the depressing effect of sedentary habits and occupations in these respects how much of it is avoidable and attributable to the unhygienic conditions, personal and otherwise, under which such occupations are carried on? It will be frequently found that the offices, rooms, and places of business in which clerks and others are employed for the greater part of the day are small, badly lighted, ventilated, and warmed, that the air is more or less stagnant and foul owing to complicated or bad structural arrangements, with probably narrow, tortuous, dark passages, that the water-closets are improperly placed, and that a good deal of overcrowding exists. Now although a sedentary life is not, of course, the healthiest kind of life it is nevertheless more or less healthy in proportion as the local conditions are healthy or otherwise. Clerks and city employés are not generally robust folk, they usually possess a feeble circulation, their work is nerve-exhausting, entailing as it does various degrees of mental tension and strain of eyesight, and sedentary work is, moreover, cold work. Those employed are liable from the nature of their duties and the closeness of the atmosphere in which they have to pursue them to headaches and a feeling of exhaustion which probably induces many of them to have recourse to "nips" of alcohol. The necessary remedies obviously are fresh air and light, together with warmth; the incoming air requires to be warmed during the greater part of the year in this climate. Business people in the city, even to put the matter on merely economical grounds, do not practically get the best attainable out of those in their employ for want of proper care and attention to these details, to say nothing of the inconvenience and pecuniary loss arising from frequent absences from temporary causes of ill health. Great improvement has no doubt taken place of late years and most of the banks and large city offices are well provided in these respects, but there still remains much to be done which could be effected if enlightened views about the laws of health and hygiene were more generally recognised than they are.

THE POSITION OF THE HOSPITAL MEDICAL OFFICER AS WITNESS AT AN INQUEST.

AT an inquest held recently at Lowestoft on the body of a man who died in the hospital there, Mr. H. Bournes Walker, one of the honorary surgeons to the institution, was called to give evidence as to the cause of death. Before doing so he said that he was bound to make some remark as to the conditions under which he had been summoned there that day. This was the fourth time upon which he had been called as a medical man to give expert evidence as to the cause of death and had received no fee whatever. That fee was refused on the ground that he was a hospital surgeon and he thought it was manifestly unfair that because he gave his services to a charitable institution the Crown should demand his attendance at an inquest without fee. His duty consisted in treating patients, but when death unfortunately ensued he considered that his duty ceased. He had nothing to do with a patient after he had died in the institution. But the Crown stepped in and said that he must perform certain duties. He had performed a very fatiguing and unpleasant necropsy by order of the coroner, a task which had engaged his attention for no less than four hours, and now he had to give expert evidence. He thought it only fair to himself and his colleagues to protest against being compelled to give expert evidence without receiving any fee. The coroner (Mr. C. W. Chaston) thought the protest had been rightly made. He fully sympathised with Mr. Walker, and he thought the law, as it applied to the case under notice, was

wrong. He very much doubted when the Act was made if it was intended to prevent a fee being paid to a medical witness in such cases. But the county council were not to blame in the matter. He had consulted their deputy clerk and learned that their feelings were in accord with his own, but he regretted that in the present state of the law no fee could be paid. There was a time when some coroners did pay and he himself had stretched a point, but if he were to pay now the Government auditor would surcharge him. He had, however, communicated with Mr. H. S. Foster, M.P., and the matter had been debated by the council of the Coroners' Society, who said that it was an injustice and thought that some steps should be taken to get the law altered. But why did not the medical men go to their own strong society to get the law altered? He himself should be very glad to see a fee paid in such cases. Mr. Walker thanked the coroner for his expression of opinion, and we take the opportunity, in behalf of hospital officers, of doing the same. We are not prepared to say flatly that all hospital medical officers should always be paid for all evidence at all inquests, but it is certain that discretion in the matter should be vested in the coroner.

THE PHARMACEUTICAL SOCIETY OF GREAT BRITAIN.

THERE proved to be a wealth of subject at the disposal of the speakers on the occasion of the annual dinner of this society, which took place at the Hotel Cecil on Tuesday, May 17th. The Pharmacy Acts Amendment Bill was discussed, the New Pharmacopœia was a common topic at the table, a code of ethics was enthusiastically upheld, quackery and delusive and subtle advertisements were denounced, and lastly an interesting reference was made to liquefied hydrogen by Professor Dewar, who has recently achieved this result in a practical manner. Professor Dewar, in reply to the somewhat comprehensive toast "Science," referred to the close relationship of chemistry to pharmacy and to the excellent and original research which many pharmacists had taken up with results of far-reaching interest and importance to chemical science. He would be sorry to say how much the work of investigation at the Royal Institution had cost, but it had largely been defrayed by the contributions of friendly men of science and probably in no other country would the work have been possible without Government aid. The Hon. W. F. D. Smith, in responding to "The Houses of Parliament," complained of the pressure of public business which had largely militated against the Pharmacy Acts Amendment Bill, of which he was the introducer, receiving the consideration which it deserved. There was little chance, he feared, of a new measure being passed this session. In the meantime the matter should be strongly urged upon the notice of Ministers and no time should be lost on the part of pharmacists themselves to put forward the strongest possible representations in favour of amendment. Mr. G. T. W. Newsholme (Vice-president), in giving the toast, "The Medical Profession," expressed approval of the action of the General Medical Council in the steps which they had taken to improve the status of the profession and the placing of restrictions upon unqualified men; he wished a similar course could be more severely adopted in the pharmaceutical profession. In reply to this toast Sir Walter Foster said that the medical profession owed much to pharmacists. They had given invaluable assistance towards the completion of a new Pharmacopœia which was a national work. He trusted that the Pharmacopœia would prove a means of eradicating the widely-advertised nonsense about certain drugs and preparations. The public required to be protected against such statements and eventually education, he confidently hoped, would put a stop to all quackery. Mr. Bryant, President of the Royal Medical and Chirurgical Society, with whose name also the toast was coupled, endorsed the previous speaker's remarks and acknowledged the help of the committee of the Pharmaceutical Society and of Dr. Attfield in the accomplishment of the new Pharmacopœia. The toast of "The Society," coupled with the Health of the President, was proposed by Sir J. Crichton Browne and Mr. Walter Hills responded. The company present was a large one and included many representative men of science and medicine. We congratulate the society on its success and on its admirable aims in regard to making the pharmaceutical profession an honourable and dignified one.

MEDICAL REFEREES UNDER THE WORKMEN'S COMPENSATION ACT IN SCOTLAND.

THE Secretary of State is now prepared to receive applications for the appointment of medical referee under the Workmen's Compensation Act, 1897, in Scotland. The arrangements adopted for Scotland are the same as those already announced for England and Wales, except that in the distribution of appointments the sheriffdom is substituted for the county-court circuit. The duties and the fees of the referees and the qualifications required from candidates are exactly the same. All applications should be addressed to the Private Secretary, Home Office.

THE RIVER BRENT.

THE Middlesex County Council are promoting a Bill to make more effectual provisions for preventing the pollution and obstruction of the streams of the County of Middlesex and to confer further powers on the County Council of Middlesex for that purpose. This Bill contains sections relating also to the granting of loans to local authorities, to questions concerning main roads, and to other matters with which we are not concerned. The preamble of the Bill states: "Whereas the waters of the Brent and other streams of the County of Middlesex or parts thereof are, especially in dry seasons, so polluted by sewage and otherwise as to cause a nuisance and to endanger the health of the residents in their vicinity," that the Middlesex Council wish to have power to take means to preserve the purity of the water, to dredge the river, to shorten bends, to cut trees which may obstruct navigation, and to place weirs on parts of the river. Certain powers are also asked for in relation to weirs on the Grand Junction Canal and to ensure the purity of the water of the Brent reservoir. It is provided that in case of dispute between the canal companies and the County Council matters shall be settled by arbitration. District councils are to be authorised to contribute towards the expenses of the County Council for the inspection of lands for any purpose connected with carrying out the provisions of the Bill. Power of entry is provided and samples of sewage effluents may be taken. Sanitary authorities are to afford facilities for factories to drain into their sewers. No new sources of sewage pollution are to be allowed and liquid sewage is no longer to be sent into the river or into the streams which feed it. Existing sources of pollution are to be discontinued and provisions are made for enabling the Council to ensure that this is done. Owners are to be served with notices to abate within a reasonable time any nuisance which may exist and the Council are to have power to stop outlets to sewers which at present discharge into the stream or its effluents. Weeds and offensive matters are not to be thrown into the stream. Factories are not to discharge polluted liquids into it. The river must not be dredged without licence from the council nor may the water be abstracted from it. At the present time the supply of water to the Regent's Canal and its collateral cuts are obtained

from a reservoir on the Brent in the parishes of Kingsbury, Willesden, and Hendon. The Brent reservoir was constructed prior to the year 1852 and is maintained under powers of various Acts of Parliament, amongst which there is a local and personal Act of the thirty-third year of George III., chapter 80 (1793). This is the Act which authorised the construction of the Grand Junction Canal. In 1851 an Act called the Regent's Canal Reservoir Act was passed which authorised an enlargement of the Brent reservoir. Under these Acts provision was made for the delivery from time to time into the River Brent of such a quantity of water as should be lost by the construction of the works authorised by these Acts. In the year 1892 the Regent's Canal City and Docks Railway Act was passed and under its provisions the North Metropolitan Railway and Canal Company became owners of the undertaking and proprietors of the Regent's Canal. It is found that the amount of water flowing down the River Brent is materially diminished and that it is insufficient to keep the stream in a cleanly state.

THE CONTROL OF INFECTION AND CONTAGION IN SCHOOLS.

IF every layman were possessed of such medical knowledge as to enable him to recognise the earlier symptoms of infectious disease we should be in a better position to control and to prevent epidemics than we are in at present, but pending the advent of this state of affairs we must perforce do the best we can with the imperfect material at our disposal. If all our school-children could be examined daily by medical men who had had exceptional experience in infectious disease and in diseases of the skin we should be able to reduce the damage done by schools *quâ* infection to a minimum, and it may be that before the next century has far advanced we shall see some such system as this generally in force. Meanwhile we must ask for the assistance of the school teacher and of the parent, and the former of these may render very valuable aid by virtue of the fact that he knows the children and is thus able to detect any marked departure from their normal condition. The teacher must, however, have certain rules to guide him in arriving at a conclusion as to what course he is to take, and it is in this direction that he may well look for the assistance of the medical officer of health. Dr. Meredith Young, the medical officer of health of Crewe, has recently forwarded to us a placard relating to "Particulars of certain Infectious or Contagious Diseases for the Guidance of School Teachers," a copy of which is hung up in each class-room of every school in Crewe. The diseases in question are divided into two classes—*A* and *B*. In the case of *A* all children from the infected house are to be excluded from school; in the case of *B* the exclusion of the actual sufferer is alone insisted upon. In class *A* are scarlet fever, diphtheria, measles, German measles, whooping-cough, chicken-pox, mumps, influenza, and small-pox; in class *B* are erysipelas, ringworm, skin diseases of the head, scabies, and ophthalmia. The placard is divided into three columns. In the first is the name of the disease; in the second are the signs and symptoms of each disease together with the channels by which infection is supposed to be given off; and in the third column is set forth the period for which in each instance the children should be excluded from school. The suggestions are that when the teacher considers as a result of his observations that a child may be suffering from any of the diseases enumerated the child (and in certain cases all the children from the same house) shall be sent home with a note to the parents asking them to have the child examined by a medical man without delay. The parent is also to send word to the teacher as to the result of the medical examination. In the case of scarlet fever, diphtheria, and small-pox the children are not to return until a certificate is received from the medical officer of health, but in the case of all the other diseases the teacher is apparently to exercise his discretion after consulting the memorandum. Apparently in the case of class *A* no discretion is left to the teacher as to sending home the other children from the same house, but it appears to us that it might be well to modify this clause so as not of necessity in a doubtful case to send away all the children in the first instance. There will probably, too, be some difference of opinion amongst medical men as to the inclusion and omission of certain diseases in class *A*; no reference in either class is made to enteric fever. But what in practice the memorandum amounts to is that if a child appears to be ill or presents any eruption or rash he or she should be sent home, and this is no doubt an excellent arrangement. The difficulty will begin when the parent is invited to call in a medical man. Dr. Young casts a wide net in enumerating the channels through which infection may be given off, but it is well to err on the safe side. The memorandum is one of considerable interest both from an academic and utilitarian standpoint, and it might be profitably discussed by the Society of Medical Officers of Health.

CEREBELLAR AND SPINAL SYMPTOMS IN MEMBERS OF THE SAME FAMILY.

IN a recent number of the *Revue de Médecine* Dr. Pauly and Dr. Bonne record an interesting observation of three brothers who showed similar symptoms of disturbance of the nervous system. There was no evidence of hereditary weakness, for several sisters were quite healthy and there was no morbid condition evident in the parents. The symptoms commenced in the two older brothers between the ages of twelve and fourteen and in the youngest brother at the age of six years. Difficulty in walking was the first thing noticed in the two elder brothers, nystagmus in the youngest. In all these during rest the legs were slightly flexed and could not be fully extended. There was also marked contraction of the adductors. The gait showed a combination of weakness and spasticity. In the youngest patient, who was eleven years of age at the time of the observation, walking was no longer possible except with assistance. There was no ataxy either in standing or in walking. There was no paralysis in the arms, but there was a little tremor on voluntary movement. In all these brothers there were nystagmus, slow and monotonous articulation, exaggerated reflexes, and commencing optic atrophy. Sensation and intelligence were quite undisturbed. The cases resemble closely those described a few years ago by Dr. Sanger Brown and by Dr. Pelizäus and Dr. Higier and probably depend upon defective development of the nervous system analogous to what is found in Friedreich's ataxy, although not identical with the conditions underlying that disease.

OPENING OF A NEW HOME AT THE CHALFONT EPILEPTIC COLONY.

THE experiment made by the National Society for the Employment of Epileptics of establishing an industrial colony where sane epileptics who were debarred by their affliction from obtaining employment might not only find opportunities for useful work but might also receive the care and supervision necessitated by their complaint has proved so successful that the number of colonists will shortly exceed 100. On May 12th a large number of supporters of the institution visited the colony, which is situated in a very beautiful part of Buckinghamshire. Among those present were the Duke and Duchess of Marlborough, the Duchess of Bedford, Sir

William Broadbent, Mr. and Mrs. Passmore Edwards, Mr. Micholls (chairman of the committee), Dr. Buzzard, Colonel Montefiore, Dr. Fletcher Beach, Dr. Nicolson, C.B., Miss Caine, M.B. Lond., Mrs. Burgwin, and Dr. Colman. The new Victoria Home for men was opened by the Duchess of Marlborough and afterwards the foundation stones of two new homes, one for boys and one for girls, were laid by the Duke of Marlborough and Mrs. Passmore Edwards respectively. In responding to a vote of thanks the Duke of Marlborough expressed his firm conviction that the important questions for public men in the future would be those dealing with the best means of ameliorating the condition of the masses of the population. He considered that although the initiation of charitable enterprises was in this country left to private generosity and enterprise, yet they ought to receive some encouragement at the hands of Government. There are now four homes open, each accommodating 20 colonists, and when the children's homes are open there will be 40 more inhabitants of this little village. The chairman announced that the committee were anxious to obtain funds in order to build a house for a resident medical officer. With so large a number of colonists there should certainly be no delay about such a step. When children are admitted the need for a medical superintendent will be even more urgent than it is at present and we have good reason to believe that no application for a Government grant towards the expenses of education is likely to be entertained until there is a resident medical officer. Up to the present nearly all the homes have been built through the munificence of one man—Mr. Passmore Edwards. Surely there are other wealthy men, knowing possibly from their own family experience how great a boon such an institution must be to the poor, who can come forward and make it possible for the committee to provide adequate medical supervision and prompt medical assistance in cases of accident or emergency.

STREET NOISES.

AT last a step in the right direction has been taken with regard to the curse of street noises. It will be remembered that in November, 1897, a man named Kruse was convicted by the Kentish magistrates and fined £1 for conducting a religious service in the open air after being requested to desist. The conviction was obtained under a by-law of the Kent County Council to the following effect:—

"No person shall sound or play upon any musical or noisy instrument or sing in any public place or highway within fifty yards of any dwelling house after being required by any constable or by an inmate of such house personally, or by his or her servants, to desist."

The conviction was appealed from and judgment was at length delivered on May 14th in the Queen's Bench Division, the court consisting of the Lord Chief Justice, Sir F. Jeune, Lord Justice Chitty, and Justices Mathew, Wright, Darling, and Channell. The Lord Chief Justice delivered a judgment which was concurred in by all except Mr. Justice Mathew, and Sir F. Jeune gave a judgment to the same effect. The conviction was upheld. Lord Russell remarked that the contention that the by-law should contain the qualification that the music should be an annoyance would render it inoperative, for who was to be the judge of what was or was not an annoyance? Now if the Kent County Council can pass a by-law of this kind there is no earthly reason why the London County Council should not do likewise. Only in addition to the "music" question it must contain a clause to prohibit the yelling of newspaper hawkers. As we have said over and over again there are plenty of newspaper sellers who do not yell and who yet make a living. The nuisance daily gets worse, the Strand and Piccadilly-circus are simply unbearable for most of the day, while the more strictly residential districts are pestered on Sundays with small boys crying the ordinary Sunday papers and in addition since the war began with "sturdy vagrants" who howl "late Sunday speshuls" containing, to judge by the following morning papers, lies of the most unblushing description. The honest, if not sweet-voiced, costermonger may be put up with, but the "runner" or purveyor of what used to be called "cocks"—i.e., the "awful slaughter" innuendoes—must be put down with a heavy hand and the sooner the London County Council see to it the better.

THE ROYAL COMMISSION ON THE DISPOSAL AND TREATMENT OF SEWAGE.

IN our remarks on the constitution of this Commission in an annotation in THE LANCET of May 14th we should have stated that two of the commissioners are engineering authorities—viz., Major-General C. Phipps Carey, R.E., one of the deputy engineering inspectors to the Local Government Board, and Mr. C. P. Cotton, M.I.C.E., chief engineering inspector to the Local Government Board for Ireland. It is probable that sub-commissioners will also be added who are competent to investigate the bacteriological and chemical sides of the question.

ENGLISH MEDICAL MEN IN ITALY.

THE General Medical Council and the Royal Colleges of Physicians of London and Surgeons of England are to be congratulated on the result of their efforts to induce the Italian Government to abandon its intention of making it illegal for English medical men to practise in Italy without acquiring an Italian diploma. Such a proposal in all the circumstances and relations of the two countries was felt here to be unreasonable and illiberal and unworthy of the Italian Government and people. Its abandonment, on the other hand, will be regarded as another proof of the friendly and generous feeling which Italy has always shown to our country and countrymen. The profession will not forget the service which Lord Salisbury and the English Ambassador at Rome have rendered in regard to this matter.

HEMANS v. COLGATE AND ANOTHER.

AN action against two medical men has been successfully defended by the London and Counties Medical Protection Society through their solicitors, Messrs. Le Brasseur and Oakley. The action was brought in the Queen's Bench Division, before the Lord Chief Justice and a Special Jury, by Mr. Henry Hemans, an engineer in England and Buenos Ayres, against Dr. Henry Colgate of Eastbourne, who acted as the plaintiff's medical adviser, and Mr. George Arthur Skinner, surgeon, of the Waterside Hydropathic Establishment, Upperton-road, Eastbourne, in whose institution the plaintiff was received and detained, it was alleged, from Nov. 29th, 1895, till Jan. 9th, 1896, when he escaped. He sought to recover damages for negligence in treatment and for false imprisonment. The plaintiff's case was one of overwork and required, according to Dr. Colgate, the Weir Mitchell treatment and rest for six weeks. He wished to go to Matlock, but went to the Eastbourne establishment on Dr. Colgate's advice. He soon complained of noises and that the establishment was unsuitable for him. He was dissatisfied with his room and with the environment generally. He alleged that his clothes were taken away and that a letter to his daughter to remove him was suppressed. Under cross-examination these statements were much weakened. The door was open all day and he admitted that it never occurred to him that his clothes were in the wardrobe. At the close of his evidence the jury intimated that in their opinion no case had been made out. The Lord Chief Justice seemed to be of the

same opinion throughout and he observed that in the plaintiff's state of health he might have regarded as troubles things which would not have affected other people. Finally verdict and judgment were entered for the defendants with costs. We need not say that we concur in the justice of the verdict and congratulate the defendants on such a righteous end to the annoyance which such a case implies to medical men.

"THE REMUNERATION (?) OF POOR-LAW MEDICAL SERVICE."

MR. HORACE SWORDER, the medical officer of health of Luton Borough, writes to us to point out the inaccuracies in a paragraph which appeared recently in the *Daily Telegraph* and upon which we founded some comments last week. Mr. Sworder is not medical officer to the Union Workhouse and has not to supply 10,000 or any other number of bottles of medicine out of his salary which, moreover, was not correctly stated. We are sorry to have misrepresented Mr. Sworder's position.

MEDICAL SOCIETY OF LONDON: ANNUAL CONVERSAZIONE.

THE 1897-98 session of the Medical Society of London was closed on May 16th by the delivery of the annual oration and a conversazione of the Fellows and their friends. The orator for the year was Dr. Frederick Roberts and his oration, which appears in full in another part of this issue, was listened to by an overflowing audience. Sir William Broadbent proposed and Mr. A. E. Barker seconded a vote of thanks to Dr. Roberts for his eloquent and interesting address and the vote was enthusiastically carried. A conversazione followed in the society's rooms which were beautifully decorated with palms. The annual gathering was certainly one of the most successful which has taken place, thanks to the arrangements of the honorary secretaries, Dr. Robert Maguire and Mr. W. H. Battle, and the registrar, Mr. Hall.

LONDON'S PLAYING FIELDS: AN APPEAL.

AMONG the many things which are needful for promoting the health of London's teeming millions is the provision of adequate space in which the workers can indulge in open-air games for recreation; but owing to the encroachment of the builder the provision of such spaces becomes year by year more difficult. The London Playing Fields Committee, of which H.R.H. the Duke of York is President, have already provided over 100 cricket pitches and 18 football grounds in various places round London for the use of clerks, workingmen, and boys who are able to pay a small sum for maintenance, thus leaving the limited area in public parks and commons entirely free for the use of the poorest players. The committee, however, hold these grounds on lease only and from time to time they have to be given up for building purposes. One of the spaces held by this committee is at Raynes Park, Surrey, called the Prince George's Ground, after the name of the Royal President of the committee. This comprises about 25 acres and the field has been laid out at a cost of £1100 for football and cricket. It is held under a lease of 10 years dating from 1891, but up to the end of the present year the committee have the opportunity of purchasing the site for the sum of £10,000. Towards this amount H.R.H. the Duke of York headed a subscription list last year with £10 and H.R.H. the Duchess of York gave £5. The appeal has resulted in a sum of £1345 paid or promised, but as it is necessary to complete the purchase fund in 1898 the committee ask the help, not only of lovers of cricket and football, but of all who realise the importance and the difficulty of maintaining the bodily health and development of our vast city population. Donations to the fund will be received by the chairman of the London Playing Fields Committee, the Hon. E. Chandos Leigh, 45, Upper Grosvenor-street, W.; Mr. E. N. Buxton, Knighton, Buckhurst-hill, Essex (treasurer); Mr. T. Hall Hall, 5, New-square, Lincoln's-inn, W.C. (deputy-chairman); Mr. H. D. G. Leveson Gower, 11, Birchin-lane, E.C. (secretary); or they may be paid directly to the bankers, Messrs. Barclay and Co., Limited, 1, Pall-mall East, S.W. All cheques and postal orders should be made payable to "Prince George's Ground Purchase Fund" and crossed "Barclay and Co., Limited."

PERIODICAL PARALYSIS OF THE SUPERIOR OBLIQUE MUSCLE.

IN a recent number of the *Neurologisches Centralblatt* an abstract appears of an interesting case recorded by Dr. Aug. di Luzenberger in *Manicomio* XIII. The patient was a man, aged twenty-nine years, whose mother had suffered from migraine. At the age of twelve years, after a long walk in the sun with his head uncovered, he was seized with severe unilateral headache, with loss of appetite, nausea, and diplopia. At first the attacks occurred almost every week, lasting a day, and the headache and diplopia came and went almost simultaneously. In the course of a year they became less frequent, but lasted longer, finally persisting for fifteen days. The last attack observed by Dr. Luzenberger lasted twenty days. In this the headache and nausea began in the afternoons and lasted till bed-time. The diplopia, however, was continuous. The attack was accompanied by loud pulsation in the head and the right temporal vein was better filled than the left, although there was no asymmetry of the head. The diplopia was found to depend upon paralysis of the superior oblique muscle and the eyes presented no other abnormality. The headache was got rid of by moderate doses of bromide, but the diplopia persisted for fifteen days' longer and then disappeared without leaving any change in the eyes. The temporal vein also on the side on which it had been distended became normal. Dr. Luzenberger suggests that the underlying cause of the phenomena is a periodical swelling of the cavernous sinus with consequent pressure on the first branch of the fifth nerve and also on the fourth. The case, of course, is similar to others which have been described in which, however, the paralytic phenomena have been the result of an affection of the third nerve.

A COMMITTEE OF INQUIRY INTO THE ALLEGED INJURIOUS EFFECTS OF X RAYS.

IT having been alleged that injurious effects on the human body have been caused by exposure to x rays it was decided at a meeting of the council of the Roentgen Society on April 5th to nominate a committee to collect information on the subject. The following members were selected, with power to add to their number: Professor Sylvanus P. Thompson (president of the society), Dr. David Walsh (secretary of the society), Mr. Thomas Moore, Dr. Barry Blacker, and Mr. Ernest Payne (Hatchlands, Cuckfield, Sussex), who is acting as secretary to the committee. We are informed that the committee will be glad to hear from all workers with x rays of any case of injury that may have come under their notice after exposure of a patient to the rays and in order to obtain accurate reports the committee have prepared a set of questions which have been framed with a view to elicit opinion and collect information to show whether the injury was the result of any of the following causes: (1) the x rays themselves directly; (2) some electrolytic or electro-thermal action of a leakage discharge

current from the leads or from the terminals of the tube; (3) some action due to the varying electrostatic charges on the surface of the tube; (4) some combination of these; (5) some other hitherto unrecognised kind of radiation emitted simultaneously with the x rays; or (6) some other cause hitherto unobserved. The secretary of the committee will be glad to send copies of the questions to any medical man or other worker in x rays who may know a case about the circumstances of which he is willing to give particulars. No names will be published in connexion with the information supplied except by the distinct consent or request of those concerned.

UNIVERSITY OF LONDON.

THE election of a Fellow of the Senate of the University of London will take place on Tuesday, May 24th, and the nomination lists as well as the addresses are in the hands of the graduates. The nomination is largely in favour of Mr. Fletcher Moulton, Q.C., who will evidently poll a very considerable majority of country graduates, whilst almost every graduate who is a London teacher is supporting Dr. Benson. The question, therefore, resolves itself into this: shall country graduates determine the needs of a local University for London, and shall uniformity of the examination standard take the place of a well-considered curriculum of education? The suggestion of Mr. Moulton's committee that "teaching functions should be added to the present work of the University through a supplemental charter framed so as to confer the necessary powers" is obviously impossible and would be opposed by every teaching institution in London.

A CONVERSAZIONE will be given by the British Balneological and Climatological Society on Wednesday, June 8th, at 9 P.M., at Limmer's Hotel, Conduit-street, when Dr. G. Vivian Poore will deliver an address on "Circumstances which Influence the Effectiveness of Climatic Treatment." There will be an exhibition of meteorological instruments by Messrs. Negretti and Zambra and Dr. W. S. Hedley will show a Radiant Heat Apparatus.

THE dinner given by the Lord Mayor of London in the interests of the London Hospital on Wednesday night last proved a very successful function. New annual subscriptions to the extent of £4500 were announced and donations amounting to £39,000. Among these donations were two anonymous ones, of £25,000 and £10,000 respectively.

WE understand that Mr. Collings has drawn up a draft report which will be presented to the Petroleum Committee on June 10th. The end, therefore, of a very long and protracted inquiry is near and the report will be awaited with interest by a large number of persons.

SIR MATTHEW WHITE RIDLEY, in answer to Mr. Pickersgill and Sir Charles Dilke, has intimated in the House of Commons his intention to order a prosecution in respect of an alleged breach of the Factory Acts in connexion with recent cases of phosphorus poisoning.

HER MAJESTY THE QUEEN has sent £100 to the London Hospital in aid of the special appeal now being made.

MEDICO-PSYCHOLOGICAL ASSOCIATION. — The spring meeting of the Northern and Midland Division of this association will be held at Cheadle Asylum, near Manchester, on May 25th, 1898. Mr. G. W. Mould will open a discussion on the new Lunacy Bill, and will also provide lunch and dinner for the members attending.

THE REGISTRAR-GENERAL'S ANNUAL SUMMARY FOR 1897.

THE Registrar-General's annual summary of births, deaths, and causes of death for the year 1897 has just been issued. Like its predecessor for 1896 this summary contains a useful and succinct account of the mortality, not of London only, but of thirty-two of the other great English towns, and if only arrangements could be made for its production somewhat more promptly than at present after the close of the year to which it relates the value of this publication both to the sanitary branch of our profession and to the public generally would be greatly enhanced. In its present advanced state of development, which it attained for the first time in 1896, the summary seems to leave little to be desired taken as a record of mortality alone in our great centres of British industry. But we confess to a feeling of disappointment at the thought that although so much has been done of late years to perfect the English system of notification of those important and destructive maladies which are communicable from person to person no attempt has hitherto been made to collect and publish a record of such maladies, although they are known to levy an oppressive death-rate on the most valuable lives of our population. The summary now before us shows that in the Statistical Office of Somerset House the State possesses a department competent to deal with the national records of mortality in such fashion as to extract from them the maximum of instruction for preventive purposes which such partial records are capable of rendering. It would therefore seem to need but a slight addition to the work of that office if a similarly detailed record could be added of those cases of infectious sickness which are not necessarily fatal, but an accurate knowledge of the prevalence of which in our industrial centres is, from a sanitary standpoint, even more valuable than the most accurate statement of mortality could possibly be. The returns of the Registrar-General are at present published at weekly and quarterly as well as yearly intervals, and it is reasonable to surmise that as a properly trained staff at Somerset House is constantly engaged in this work the development now suggested would necessitate but slight modifications in the establishment already existing. The deaths registered within the 52 weeks of the year 1897 in the 33 great towns of England were equal to a rate of 19·1 per 1000 of the aggregate population, or 1·7 per 1000 more than the death-rate of England and Wales in the same year. Calculated with due regard to the differing age-constitution of the several populations, the death-rates ranged from the lowest, 13·6 in Croydon and 15·2 in Brighton to the highest 26·8 both in Liverpool and in Preston. The corrected death-rate of London in 1897 was 19·4 and was considerably lower than the average rate in the preceding ten years. The presence of large public institutions in certain parts of London unduly raises the recorded death-rates of the areas in which they are situated, whilst the mortality of other areas from which patients have migrated to those institutions is unfairly lowered. Until the deaths occurring in public institutions have been distributed to the sanitary areas from which the patients originally came it is impossible to calculate reliable rates of mortality for these areas. The rates of mortality for metropolitan sanitary areas were published for the first time in the annual summary for 1896, the establishment of a quinquennial census for London having rendered it possible to frame trustworthy estimates of district populations.

Some of the London sanitary areas afford striking examples of the necessity for the distribution of mortality just referred to. The City of London, for instance, contains amongst other institutions St. Bartholomew's Hospital and the City workhouse. The deaths registered last year in the City numbered 1054, but of these 653 occurred in public institutions and were mostly deaths of persons belonging to outside areas. After distribution of these deaths the number belonging to the City was only 642. The uncorrected death-rate of London City therefore stood at 35·0 per 1000, whilst the corrected rate did not exceed 21·3. On the other hand, in the Bermondsey sanitary area only 1411 deaths were registered last year, but when the deaths of Bermondsey residents which took place in institutions outside its

boundaries are included the death total is raised from 1411 to 1883 and the death-rate from 16·5 per 1000 to 22·1. In the same manner the death-rate of St. George-in-the-East was raised from 21·9 to 26·4 and that of St. Saviour's from 17·1 to 24·6. Infantile mortality—i.e., the proportion of deaths under one year to births registered—was equal last year to 177 per 1000 in the 33 great towns and was 1 per cent. above the decennial average. The proportions ranged from the lowest, 131 in Huddersfield and 144 in Brighton, to 219 in Salford, 220 in Burnley, and 262 in Preston. In London infantile mortality averaged 159 per 1000 births and was slightly above the average. After distribution of the institution deaths infantile mortality was equal to 116 per 1000 in Plumstead, 121 in Stoke Newington, and 130 in the City of London; in the other metropolitan areas it ranged upwards to 193 in Limehouse, 195 in St. Saviour's, and 197 in St. George-in-the-East. A table is given which shows in a summary form the number of lives saved and the number lost in London last year as compared with the previous decade. The net gain in life saved is represented by 7651 lives. In other words, had the average death-rate in 1887–96 continued throughout 1897 there would have been sacrificed 7651 lives in addition to those actually lost by death. As compared with the average there was an excess last year of 222 deaths from diphtheria, 1156 from diarrhœal disease, 475 from cancer, 282 from premature birth, 135 from urinary disease, and 134 from accident. Under most of the other headings the registered mortality was below the average. There were only 18 deaths from small-pox last year in the 33 great towns, as compared with 732, 450, 120 and 25 respectively in the four preceding years. Of these deaths 16 occurred in London, 1 in Bristol, and 1 in Hull. Measles caused a mortality equal to 0·55 per 1000 in the great towns. The rates varied from 0·03 in Norwich and 0·07 in Leicester to 2·22 in Salford and 2·77 in Preston. In London the mortality from this disease was at the rate of 0·43 per 1000 and was therefore above the average. In metropolitan sanitary areas the rate ranged from 0·02 in Paddington to 1·42 in St. George-in-the-East. Scarlet fever caused a mortality of 0·18 per 1000 in the great towns, against an average of 0·27. In Preston and Bradford the rate was only 0·04 per 1000, but it rose to 0·32 in Huddersfield, 0·33 in Liverpool, and 0·35 in Leicester. Scarlet fever caused a mortality of 0·18 per 1000 in London, which was decidedly below the average; the rate did not exceed 0·06 per 1000 in Marylebone and Stoke Newington, whilst it equalled 0·40 in Bermondsey and 0·54 in Rotherhithe. The mortality ascribed to diphtheria averaged 0·31 per 1000 in the great English towns, which is below the rate in either of the four previous years. In Sunderland and Preston the rate was only 0·03 per 1000, but it was as high as 0·57 in Burnley and 0·62 in Wolverhampton. In London the rate averaged 0·51 per 1000 and was lower than in either of the three preceding years. In metropolitan sanitary areas the diphtheria rate ranged from 0·13 in St. James's, Westminster, and 0·17 in St. Olave to 0·73 in Clerkenwell and Bermondsey and 0·80 in Woolwich. Whooping-cough gave rise to a death-rate of 0·41 per 1000 or 0·14 below the average in the 33 great towns. The lowest rate was 0·07 per 1000 in Croydon and in Swansea and the highest 0·31 in Salford and in Sheffield. In London the death-rate from this disease averaged 0·41 per 1000 and ranged from 0·11 in Kensington and 0·13 in Lee to 0·73 in Bermondsey and 0·74 in Clerkenwell. Continued fevers, mainly enteric, gave rise to a mortality of 0·18 per 1000, which is slightly below the average. The lowest rates were 0·07 in Croydon and in Swansea, and the highest 0·31 in Salford and in Sheffield. The rate averaged 0·13 in London and was slightly below the decennial average. Among sanitary areas, the lowest rates from enteric fever were 0·05 in Rotherhithe and Plumstead, and the highest 0·29 in Stoke Newington and 0·30 in the City of London. In the 33 great towns diarrhœal diseases caused an average mortality of 1·24 per 1000, which was higher than that of either of the 10 preceding years. The lowest rate was 0·21 in Swansea and the highest 2·23 in Preston and in Hull. The rate averaged 0·92 in London and ranged from 0·16 in St. Martin-in-the-Fields to 1·55 in Shoreditch and 1·81 in St. George's, Southwark. The death-rate from phthisis in Registration London was equal to 1·71 per 1000, as compared with rates of 1·83 and 1·73 respectively in the two years preceding. After distribution of the deaths from phthisis which had occurred in public institutions the death-rate from that disease in the metropolitan areas ranged from 0·74 in Hampstead, 0·94 in Lewisham, and 1·10 in Lee to 3·11 in St. Luke, 3·22 in St. Saviour's, and 3·36 in the Strand sanitary area. Unfortunately the Registrar-General's summary does not afford the means of comparing the death-rates from phthisis in extra-metropolitan districts; this is one of the very few defects which we have noticed and would gladly see remedied in future numbers of what we regard as a most valuable publication.

REPORT OF THE ROYAL COMMISSION ON TUBERCULOSIS.

III.—MINUTES OF EVIDENCE AND APPENDICES.[1]

THE Blue-book was published at the end of last week, and much useful information will be found in the Appendices it contains. The first place is given to the "Report on a Visit paid to certain Places in Belgium, Germany, and Denmark," which is signed by three of the Commissioners and Professor J. McFadyean, who accompanied them in place of Sir George Brown, who was unable to leave London at the time. This Report is dated June 12th, 1897, and it is almost a pity that it could not have been published separately. On many points it amplifies the general Report, in connexion with which it should be read.

The Belgian Government, in 1895, was the first to draw up comprehensive regulations for dealing with bovine tuberculosis, and it is interesting to note that they were led to do so from the knowledge gained as to the prevalence of the disease by the complete system of meat inspection instituted in 1890. The regulations provided for the very extensive use of tuberculin by veterinary surgeons, and animals reacting to the test were to be isolated from the healthy and their sale was only to be allowed for the meat market, the limit of time for slaughter being one year. Animals showing clinical symptoms of the disease were to be slaughtered at once. Compensation was given under certain restrictions to the owners of cattle the carcasses of which were condemned as unfit for food. Provision was also made by the erection of large quarantine sheds at each place where a line of railway crossed the frontier for testing with tuberculin animals imported from neighbouring countries.

At the time of the Commissioners' visit the regulation had been in force about a year and during that time some 22,000 animals had been tested, involving an expenditure of about £40,000 in compensation.

Many persons have urged the adoption in Great Britain of a similar method for dealing with bovine tuberculosis, but the impression received by the Commissioners in Belgium was that the attempt to stamp out the disease in the native dairy stock had proved too onerous to be sustained and that if the internal measures prove unworkable or a failure the effect of the frontier quarantine, so far as it was applicable to tuberculosis, must be regarded as superfluous and extravagant.

This first measure, admittedly experimental, was found to be too drastic, as the tuberculin test was made almost compulsory on all cattle in consequence of the fact that if tuberculosis was found in an animal post mortem none of the other animals which had occupied the same shed were allowed to be sold except for the meat market unless they failed to react to the test. Since the visit of the Commissioners the law which they saw at work has been modified in such a way that in future action will only be taken by the State in cases where animals are visibly affected with the disease. The terms of this new measure are printed in full in the Appendix.

In the same Report, under the heading "Germany," a concise account is given of the system of meat inspection in the public slaughter-houses, together with valuable statistical matter on the subject taken from the annual reports by the directors of the abattoirs in Leipsic and Dresden. A description is also given of the method of insurance against loss by condemnation of carcasses adopted by the farmers and butchers in these two cities.

The Commissioners state that "in Copenhagen we found ourselves with men who were able to show a very remarkable

[1] Nos. I. and II. were published in THE LANCET of April 30th and May 7th, 1898, respectively.

degree of success in grappling with tuberculosis and in eliminating it from their herds," but as they quote in their general Report the description of their visit to Denmark it is unnecessary to refer further to it here.

The Appendix contains important statistics, such as have never appeared elsewhere, on the mortality from various forms of tuberculous disease in several age periods from 1851 to 1895, furnished by Dr. Tatham, Superintendent of Statistics, General Register Office. The information was called for from a desire on the part of Commissioners to learn whether it was possible from mortality figures to establish a relationship between the consumption of meat and milk and tuberculous disease in man. The tables comprise (*a*) all forms of tuberculous disease, (*b*) phthisis, (*c*) tabes mesenterica, (*d*) tuberculous meningitis, and (*e*) scrofula and other forms of tuberculous disease. Dr. Tatham has supplied a memorandum in explanation of the tables, his conclusion being that in the course of the last forty-five years there has been a substantial diminution in the mortality attributed to tuberculous disease in England and Wales, but that the data at our disposal do not warrant the attempt to estimate either the amount or the proportion of decrease which has taken place between the earlier and the later periods referred to. Two diagrams which he appends—one showing the annual variations in the mortality from tabes mesenterica and tuberculous meningitis from 1875 to 1895, the other showing the same with regard to tabes mesenterica and diarrhœa—bring out the close connexion which exists between the latter two diseases, as the curves in both rise and fall together. This relationship between diarrhœa and tabes mesenterica he adduces in support of his view that the latter is a very indefinite cause of death, and that the former is not unfrequently mistaken for it.

Somewhat similar tables are also furnished of the death-rate from tuberculous diseases in Glasgow by Dr. Chalmers and in Manchester by Dr. Niven.

A useful summary appears of the enactments in general statutes and of the general orders and model by-laws of the Local Government Board which are applicable to London and England and Wales, relating to (1) unsound meat, milk and milk products, (2) slaughter-houses, and (3) dairies, cowsheds and milkshops. For purposes of comparison there is a similar summary of the Scottish general and local Acts on meat and milk inspection, and of the regulations in force in the principal British colonies and in the United States. Seeing that much has been done in Continental countries to advance our knowledge of the subject, translations of the regulations on meat and milk inspection, with especial reference to tuberculosis in Germany, France, Belgium, Denmark, Norway, and Switzerland, have been made by the secretary. The Blue-book therefore forms a useful reference work on these points.

THE IRISH LOCAL GOVERNMENT BILL.

II.[1]

IN a previous article a sketch was given of the provisions and general tendency of the Bill at present before Parliament for the reform of local administration in Ireland. Attention was directed to its broadly democratic character, its general similarity, with such modifications as the special circumstances and needs of the sister island demanded, to the Bills adopted in recent years in England and Scotland, the generous character of its financial arrangements, and some of the points which specially affect the interests of the medical profession. The Bill has at all events the merits of courage, thoroughness, and consistency. It does not attempt to mend or tinker. It makes no pretence of patching up a system which is recognised to be an anachronism and which, whatever its merits, can manifestly be no longer maintained. It sweeps away most of the cherished and time-honoured privileges of the Irish gentry and leaves them, if they wish to retain a share in local administration, to take their chance at the polls. The grand jury system, as is now recognised by everyone whose opinion is worth considering, belongs to an order of things which has passed away for ever. As Judge O'Connor Morris says: "The grand jury system was part and parcel of the Protestant Ascendancy which until recent times was the distinctive feature of all Irish government. The grand juries were long confined to the Protestant caste; they were nominated, not elected, bodies composed of the leading landed gentry; they had almost absolute control over the administration of their respective counties and had a power to raise a local rate to defray the charge, a mode of taxation imposed on the occupiers of the soil in four-fifths of Ireland, at least the peasantry of the subject Catholic people. ..... The Irish Protestant squirearchy knew how to rule and every grand jury had good men of business; the police they appointed kept Whiteboyism down; the roads they constructed were the admiration of Arthur Young." By degrees the powers of the grand juries were curtailed and the central government of Dublin Castle assumed some of their functions. "The grand juries are still assemblies of county magnates; though they have been thrown open to Catholics since 1793, they are still for the most part composed of Protestants. They are selected by the sheriffs of their counties—that is, virtually, by officials of the central government; they are subject to no kind of popular choice. In theory and to a great extent in fact they administer the local affairs of the counties, including those of the smaller towns and villages of these; they make presentments—i.e., vote money for the chief public buildings, the main roads, and other public works within the counties and generally their towns; they impose a rate known as the county cess to defray the charges of these and other expenses. They are, however, ruled at many points by the central government; this appoints several of their chief officers; it subjects their expenditure to a strict audit; it has long replaced their local police by the great constabulary force of the State, and for many years they have been obliged by law to make 'imperative presentments' for public works of different kinds, such as hospitals, lunatic asylums, and courthouses, and to repay advances made to them by the Treasury." In recent times they have acquired additional powers—viz., to assess compensation for malicious injuries which is levied upon the ratepayers, and to provide for extra police in districts where crime exceeds a certain rate. The "presentments" of the grand juries require to be fiated by a judge of assize.

The Bill affects materially Irish Poor-law administration. The Irish Poor-law dates from 1838. Ireland is divided into 159 unions, and these are subdivided into electoral divisions and wards for the administration of the law. The unions are placed under boards of guardians which are controlled by the Poor-law Commissioners and to some extent by the Local Government Board. Every electoral division in rural districts returns a guardian elected by the ratepayers by a cumulative vote. The elected guardians form only one-half of the board, the other half consisting of *ex-officio* guardians. In addition to administering the Poor-law the guardians are the sanitary authorities for all rural and many urban areas. The charges of the unions are defrayed by a poor-rate assessed by the boards of guardians. In the case of lands and tenements of more than £4 in value the poor-rate is paid by the occupier like the county cess, but the occupier if he is rated at £4 or upwards deducts half of the poor-rate, which is paid by the landlord. If the occupier be rated at £4 or less the landlord pays the whole of the poor-rate. It will thus be seen that the Poor-law administration is the most democratic part of Irish local government, but the *ex-officio* guardians have been a stumbling-block and the present Bill proposes to sweep them away altogether. The boards of guardians have done their work fairly well and if fault must be found in some instances, it should be recognised that their task has often been a difficult one. They have had to deal with a great mass of poverty and to endeavour at the same time to keep down the rates. No doubt many of the poor houses are overcrowded, in many cases they are quite undermanned as regards medical attendance, and the retention of lunatic cases which should have been transferred to the asylums has sometimes amounted to a scandal. The boards of guardians have not always treated their medical officers well or seconded their efforts to bring the work of the Poor-law infirmaries and hospitals in line with modern medical and surgical progress. They have been often grudging in their allowances as regards extra fees of any kind and also with regard to leave of absence. Perhaps these things might, under all the circumstances of the case, have been expected. It is to be hoped that the new district councils, which will

[1] No. I. was published in THE LANCET of May 14th, 1898.

henceforth discharge the functions of boards of guardians, will do better.

The Bill takes from the grand juries all their fiscal and administrative functions, which will be transferred to the county councils, but leaves them the same criminal jurisdiction which grand juries in England possess. The county councils will obtain certain powers never possessed by the grand juries—viz., the assessment and levying of the poor-rate, the control of the lunatic poor, and certain powers enabling them to cope with cases of exceptional distress. The subordinate bodies, or district councils, will be elected on the same lines as the county councils, and there will be one such council for each union. These district councils will vote the lesser public works and they will take over the duties and privileges of the boards of guardians, excepting the assessment of the poor-rate, which, as already stated, will rest with the county council. All the assemblies created by the Bill will be subjected to the jurisdiction of the superior courts of Ireland, and the Local Government Board, though stripped of most of the large powers which it at present exercises, will retain a certain amount of control over the councils for the counties and other districts as regards expenditure on roads and it will have a voice in the appointment of some of their chief officers.

It will be noticed that there are many things which the Bill does *not* do. It does not seem to touch private bill legislation, which apparently will go on as before in London. This is a palpable blot which will some day demand remedy. It is not reasonable that no Irish railway can be constructed, no dock built, no extension of a municipal boundary effected, no new water-supply introduced, no sanitary reforms instituted without a Parliamentary inquiry at Westminster—an inquiry often tedious and always costly. It is not to be denied that there is some counterbalancing advantage in having vexed Irish questions tried by bodies so competent and so impartial as an average Parliamentary Committee, but on the other hand this machinery is quite too cumbrous and elaborate for many of the questions which come before it. Ireland stands as regards this question on a somewhat different footing from England and Scotland. She is a poor country and can often ill afford the cost of a Parliamentary inquiry. Then the cost of bringing witnesses to London is considerable and greater than that incurred under similar circumstances for an English or Scotch bill. It is to be hoped that in the future some machinery may be devised for dealing on the spot with some of the questions above mentioned. The Bill does not seem to contemplate any collective action of two or more counties for any purpose whatever. It is generally believed that a very important member of the present Government was at one time in favour of provincial councils in Ireland, i.e., a council for each of the four provinces of Leinster, Munster, Ulster, and Connaught. This plan whatever might have been the objections to it from other points of view, would at least have secured united action on the part of much larger areas than that of the existing counties. It must be remembered that England and Scotland present no analogy to the Irish provinces. Leinster, Munster, Ulster, and Connaught are each definite entities, with a good deal of local feeling and local tradition. Whether any plan could be devised for enabling several counties to act together for a common object—an end certainly in itself desirable—is worth the attention of practical politicians. Apparently the Bill does not contemplate anything of the kind. It is important to note that the Bill leaves the control of the police in the hands of the central government, a provision the wisdom of which will be challenged only by extreme partisans.

The debate on the second reading of the Bill showed clearly that there is no hearty or thoroughgoing opposition to the measure on the part of any important section of the House of Commons. The party led by Mr. Dillon and a section of the English and Scotch Radicals object to the financial regulations as involving a dole to the Irish landlords, but the general feeling of the House clearly was that without some provision of this sort the Bill would be quite an impossibility. Some Irish Unionists, on the other hand, view with alarm the large taxing powers with which the new councils—to be elected on a low franchise and frankly democratic in constitution—will be entrusted. They would desire some security to prevent owners of property from overtaxation and extravagance on the part of the councils. As was pointed out in explaining the financial provisions of the measure, it has been the aim of the framers to discourage wasteful expenditure and to give the new bodies full benefit of any economy which they may exercise. It is a point worth full and careful consideration whether these precautions are adequate to their declared object, and whether in some way property should not have greater influence upon the new councils. The proposal to elect the members by cumulative vote does not seem a happy one. Some better means could perhaps be found for securing the owners of property against ruinous over-taxation. Mr. Gerald Balfour is of opinion that the new councils will be inclined to parsimony rather than to extravagance. That remains to be seen, but it is not difficult to understand the fears of those who apprehend quite a different state of things.

One of the most important and delicate questions raised by the Bill is the relations henceforth to be maintained between the new councils and the central Local Government Board, and it would appear that some of the points sure to arise are left purposely undetermined. Probably there were good reasons for this course, but it may give rise to serious inconvenience in the future. The Bill is, of course, mainly in the direction of decentralisation, and the Local Government Board will be shorn of many of its most important prerogatives. This was inevitable, inasmuch as the Board is a nominated body and destitute of any true democratic element. The choice lay between enlarging the constitution of the Board or curtailing its powers, and the Government have chosen the latter alternative. Yet it can hardly happen that the relations between the new councils and the Local Government Board will permanently remain as determined by the present Bill. The framers of the Bill have to a certain extent shirked a difficult and perplexing problem, but have probably evaded a present embarrassment at the cost of laying the foundations of future trouble. Is it possible to have a central body in Dublin capable of dealing with some of the questions now decided at Westminster by means of private bill legislation? and if such a body is desirable and practicable, can it be made representative and popular in its constitution? THE LANCET does not concern itself with politics and this particular phase of Irish local government trenches on the political domain. Without expressing any opinion on the subject, it may be pointed out that bold and comprehensive as the present Bill most undoubtedly must be considered, it yet leaves a very important part of the subject untouched.

In his speech during the second reading debate Mr. John Morley dwelt specially upon this point, recalling Mr. Disraeli's remark that the Irish executive was the weakest in the world, and quoting with approval Lord Salisbury's words uttered in 1885: "Local authorities are more exposed to the temptation of the majority to be unjust to the minority when they obtain jurisdiction over a small area than is the case when the local authority derives its sanction from and extends its jurisdiction over a wider area. In a large central authority the wisdom of several parts of the country will correct the folly and mistakes of one. In a local authority that correction is to a much greater extent wanting, and it will be impossible to leave that out of sight in any extension of local authority in Ireland." To set up local bodies with large powers and a popular constitution, and then to attempt to control them by a non-elective Board sitting in Dublin would be a manifestly mistaken and short-sighted policy. The Local Government Board in England has large powers and its authority is seldom if ever challenged, although its constitution is not on a popular basis. But then it must be borne in mind that the President of the English Local Government Board is always a member of the Government of the day, is often in the Cabinet, has a seat in the House of Commons, and is directly responsible to that chamber. The Irish case is different and much more difficult. The present Bill does much but it is clear that it leaves a good deal undone.

The special medical questions which arise in connexion with the present Bill are the following: (1) the selection, position, and duties of dispensary medical officers; (2) the administration of the Poor-law infirmaries and fever hospitals; (3) the administration of the county and municipal asylums for the lunatic poor; (4) the administration of the Public Health Acts in Ireland; and (5) the selection and control of coroners. The remainder of this article will be devoted to some general considerations relating to these various questions, which will be considered in detail in the succeeding article.

Speaking generally, the Bill enlarges the sphere of popular control in medical, as in other, matters. With a few minor

restrictions the new councils will possess complete control of all institutions devoted to the care of the sick and lunatic poor. The powers of the Lord Lieutenant as regards appointments are reduced but not altogether abrogated and some of these powers will be still further curtailed as time goes on. The administration of Poor-law medical relief has been hitherto one of the most democratic parts of Irish local administration, and though it has not been a failure, neither has it been a great or unqualified success. In the election of dispensary medical officers political and sectarian feeling has often had very considerable play, yet it would be untrue to allege that bad appointments have been common or that the electors have disregarded professional fitness in making their choice. The worst that can be said is that the system itself is so imperfect that it would be a miracle if it worked really well. The dispensary medical officers are as a class overworked and underpaid. Their districts are too large and the amount of work is such that it is often quite beyond the powers of any man to discharge it with thoroughness and fidelity while finding time for private practice, which the exiguity of the fixed remuneration makes it indispensable for him to cultivate. It is much to be regretted that for even the worst paid and most laborious appointments there has too often been a shoal of candidates. While such is the case it is almost idle to complain of the disproportion between the salaries and the work. The medical profession has in such matters the remedy in its own hands. If it were once made clear that suitable candidates could not be obtained for these dispensary appointments the elective bodies would soon recognise the necessity of better salaries and a more reasonable adjustment of duties. The Poor-law infirmaries and fever hospitals in Ireland are often overcrowded and the medical service is deficient in quantity though often good in quality. Cases are not unknown where a medical officer is responsible for 500 or 600 patients. It need hardly be pointed out that under such circumstances adequate medical care and supervision are simply physically impossible. The asylums are, on the whole, among the best managed institutions in Ireland and their fortunes under the new *régime* will be a crucial test of the practical value of democratic methods in administration. They are at present controlled by boards nominated by the Lord Lieutenant and usually composed of the local gentry together with some of the leading merchants and professional men. Hence the changes effected under the Bill will be particularly manifest in connexion with asylum administration. Almost the only case in which the Bill tends in a direction not increasingly democratic is in the election of coroners. At present in rural districts they are chosen by popular election on the Parliamentary franchise. Henceforth they will be appointed by the new county councils, just as at present in some of the boroughs they are appointed by the municipal councils. No one will regret this change, the present election of coroners by popular vote being unsatisfactory and, unless under peculiar circumstances, exciting very little popular interest.

THE ASEPSIS OF TOWNS AND DWELLINGS.

AT the request of the Organising Committee of the International Congress of Hygiene and Demography held at Budapest, 1894, Professor Corfield prepared a series of resolutions relating to the sanitary conditions of towns and dwellings. These resolutions were submitted to a special joint meeting of three of the Sections of the Congress and were the subject of a very animated debate. They were ultimately referred to an international committee consisting of the following members: Professor Corfield, London (proposer); Dr. Pistor, Berlin (seconder); Herr Andreas Meijer, chief engineer of Hamburg; M. G. Bechmann, ingénieur en chef des ponts et chaussées, Paris; Professor Fodor, Budapest; Mr. Arthur Cates, architect, London; Herr Berger, chief architect, Vienna; Herr Lindley, engineer, Frankfort-on-Maine; and Dr. A. J. Martin, member of the Consultative Committee of Public Hygiene of France.

The resolutions were revised by the committee and were submitted to the International Congress recently held at Madrid, where they were adopted as resolutions of the Congress. They may be taken to represent the maximum amount of agreement possible at the present moment among sanitarians of different European countries. They are as follows:—

1. That the general health of the population is improved and the spread of diseases prevented in towns and dwellings by the immediate removal of all foul matters and by a copious supply of pure water.
2. That the paving of streets should be smooth and as far as practicable impervious to facilitate cleansing and also to prevent contamination of the subsoil.
3. Special measures should be taken in the construction of houses to prevent the access of ground-air and moisture to the floors and walls.
4. House drains should be arranged so as to avoid stagnation of their contents and to secure a rapid flow to the street sewer. Their walls should be impervious to liquids and gases, they should be freely and continuously ventilated and provided with syphon-traps to prevent the access of foul air to the houses.
5. The public sewers should be so constructed as to ensure the rapid and uninterrupted flow of the sewage to their outlets. They should always be freely ventilated.
6. The streets should be as wide as possible in proportion to the height of the houses; this proportion should be fixed in each locality, regard being had to local circumstances and to climate. Every inhabited building should be well lighted throughout its whole depth and arranged so as to have an access of air from at least two sides.
7. Special regulations should be made in each locality by the public authorities with the view of enforcing the practical application of the principles herein laid down. Governments and municipalities should resolutely and energetically carry out the preceding recommendations, especially those concerning the healthiness of dwellings.

THE "ANYTOLES."

AN important group of oily bodies of interest in medicine has recently been prepared, and the results of an investigation by Dr. F. Loeffler of the University of Greifswald have been embodied in a paper on the subject. The starting-point of the research was ichthyol, from which a definite substance, the active principle, so to speak, was isolated by Helmers some years ago. Ichthyol, as is well known, is a bituminous substance containing a large amount of sulphur and is obtained by treating the products of distillation of a bituminous quartz found in the Tyrol with sulphuric acid and then neutralising with ammonia. It has been used with encouraging results in rheumatic and skin affections and in the early stages of gonorrhœa. Its composition is allied to that of a sulphonate and this has suggested the preparation of sulphonic compounds by the action of sulphuric acid on certain mineral oils, resin oils, and other hydrocarbons. In this way some interesting compounds possessing remarkable properties have been prepared. Perhaps the most important property of these sulphonates of hydrocarbons is that they are capable of rendering certain insoluble substances soluble in water. This capacity varies with the hydrocarbon employed. Eventually it was found that hydrocarbons containing about 10 per cent. sulphur chemically combined are most suitable. If these hydrocarbons are treated with concentrated sulphuric acid, then neutralised with ammonia and the insoluble portion precipitated with alcohol, a product is obtained which possesses a comparatively very great solvent action on bodies insoluble in water. This ammonia salt derived from a hydrocarbon and remarkably rich in sulphur is called by Helmers "anytin" and it is this substance which appears to possess to a remarkable degree the property of rendering substances otherwise insoluble in water soluble, and preparations thus made soluble are called "anytoles." Thus phenol converted into soluble form by means of anytin is called "phenol-anytole." The following anytoles are now prepared, specimens of which have been submitted to us: cresol-anytole, containing 50 per cent. cresols and 50 per cent. anytin; meta-cresol-anytol, containing 40 per cent. meta-cresol and 60 per cent. anytin; creasote-anytole, containing 40 per cent. creasote and 60 per cent. anytin; guaiacol-anytole, containing 40 per cent. guaiacol and 60 per cent. anytin; benzine-anytole, containing 20 per cent. benzine and 80 per cent. anytin; eucalyptol-anytole, containing 25 per cent. eucalyptol and 75 per cent. anytin; peppermint-anytole, containing 25 per cent. peppermint oil and 75 per cent. anytin; wintergreen-anytole, containing 20 per cent. wintergreen oil and 80 per cent. anytin; turpentine-anytole, camphor-anytole, iodine-anytole, &c., all containing similar proportions of active constituent with "anytin."

A series of experiments has been conducted with the view of determining the bactericidal power of such compounds. Obviously some advantage might be gained from the fact of

the active disinfecting agent being made more soluble in water in this combined form. Anytin as a bactericide appears by itself to behave very similarly to ichthyol. Diphtheria bacilli, streptococci and anthrax germs are very susceptible to anytin, whilst other pathogenic organisms are little affected. It appears to be more energetic against diphtheria streptococcus than ichthyol, but less active against other bacteria. Next, the effect of the compounds of anytin with well-known disinfectant substances, that is, the anytoles, was tried with results which showed a remarkable superiority of the anytoles over the disinfectant substances which they contain. Further, meta-cresol-anytole prevents the coagulation of albumin on boiling. A 10 per cent. solution does not appear to damage catgut. After 48 hours the strength of the threads is not affected and they may therefore be exposed for from thirty-six to forty-eight hours by which time all spores will have been destroyed; the threads are then preserved in spirit. As the greater part of the anytole will have been soaked out of the threads by the spirit they may be used without fear of causing irritation. A 3 per cent. solution of meta-cresol-anytole scarcely attacks the skin and a 1 per cent. solution not at all, whilst an ordinary 3 per cent. carbolic solution, which is inferior in action, makes itself felt on many skins. Practical proof of the value of anytole for the disinfection of the hands was obtained. Meta-cresol-anytole appears to be a valuable application for infected wounds. The same anytole appeared to be satisfactory applied as plugs of cotton-wool in the nostrils in ozæna. Solutions of 1 per cent. strength do not irritate the uterine cervical mucous membrane and the mucous surfaces of the vaginal and male urinary tract would appear to tolerate the application of 1 per cent. meta-cresolanytole in the same way. As ichthyol is rapidly fatal to gonococci it might be supposed that meta-cresol-anytole would be even more active. Ichthyol has been internally administered with excellent results in chyluria, and here, again, it is suggested meta-cresol-anytole would probably give even better results. A 3 per cent. solution of meta-cresol-anytole has an energetic action on recent diphtheria processes corresponding to the disinfecting action established on cultures of diphtheria bacilli. It is not, however, able to kill the bacilli, but, like anytin, has an action on the diphtheria toxin. Experiments on animals by Dr. Loeffler would indicate that the two preparations—cresol-anytole and anytin—may be advantageously employed in the local treatment of diphtheria, especially as they have little action on the mucous membranes.

There seems little doubt that these new preparations may be used with advantage in certain pathological conditions, but the evidence on this point cannot be regarded yet as complete. Further investigation is being conducted and clinical trials made. This series of compounds promises, at any rate, to be of great therapeutical interest.

THE ROYAL COLLEGE OF PHYSICIANS OF LONDON.

DEBATE OF THE "FIRST YEAR OF MEDICAL STUDY."

AN extraordinary Comitia of the Fellows of the Royal College of Physicians was held on May 12th, the President, Sir Samuel Wilks, Bart., being in the chair.

On the motion of the REGISTRAR the letter from the Medical School of Guy's Hospital read at the last meeting was referred to the committee of management.

Dr. W. R. Huggard, Dr. Oswald Browne, Dr. C. J. Arkle, Dr. J. Wiglesworth, Dr. F. Parkes Weber, Dr. H. J. Campbell, Dr. H. G. Turney, Dr. G. R. Murray, Dr. A. Newsholme, Dr. B. A. Whitelegge, and Dr. J. F. W. Tatham were admitted to the Fellowship.

The report of the examiners for the Murchison Scholarship was read, recommending that it should be awarded to Mr. J. Basil Page of St. Mary's Hospital. Mr. Page was then introduced and presented with the scholarship by the President.

The adjourned discussion on the proposal made by the committee of management to recognise as a year of medical study a year spent in the study of physics, chemistry, and biology at schools and institutions approved for the purpose was then resumed. The amendment, which had been moved by Dr. Payne and seconded by Dr. Pye-Smith, was:—"That the scheme proposed in the report of the committee of management be not adopted without a rigorous scrutiny of the list of institutions recognised for instruction in chemistry, practical chemistry, and biology."

The PRESIDENT having briefly stated the position, Dr. CHURCH said that anyone who had passed the required preliminary examination in general education was admitted on the Medical Students' Register of the General Medical Council if he were pursuing his scientific studies at one of the institutions recognised by the committee of management. In other cases, although the student might have received scientific instruction, he could not register until he had entered at a medical school. It was true, as Dr. Payne had said, that very few Scottish universities recognised such institutions and the University of Oxford did not recognise any. Dr. Church pointed out that there was a time when the teaching of these sciences was practically confined to medical schools, and the majority of the teachers were members of the medical profession. But it was very different now and, provided that there was satisfactory evidence that the means and facilities for such instruction were sufficient, there was no reason why it should not be given to students before entering on their medical course. He thought that this would be to the advantage of their hospital work, and he believed that the steps taken by the committee of management would secure that the teaching of science was of good quality.

The REGISTRAR explained the method adopted by the committee before placing any institution on the list of places recognised as properly equipped for this science teaching.

Dr. STEPHEN MACKENZIE supported the amendment, contending that the committee's proposal would deprive the student of the advantages secured by the five years' curriculum, diminish the period of his subjection to "collegiate influence," scatter his places of instruction, and conduce to cramming. It would also deprive him of the opportunity of dissecting whilst pursuing his scientific studies, whilst the medical schools would be still compelled to provide this science teaching for the higher examinations. It would be more logical for the medical schools to agree to cease to hold these classes and to relegate the subjects to preliminary education.

Dr. R. LEE, who doubted whether the General Medical Council had any legal power to register medical students, moved that the report be referred back to the committee.

Dr. J. K. FOWLER said that 12 out of 18 medical schools had supported the scheme of the committee. He pointed out that at present the able student was at a disadvantage, especially as under the former four-years' scheme it was found that the average time taken in preparing for qualification had been four years and nine months. The proposal would give the student four complete years of strictly medical study and would tend to give definiteness to the work of the first year at a medical school.

Dr. WASHBOURN seconded Dr. Lee's amendment, as it would enable the committee to put the regulations in a simpler form. He felt that anatomy and physiology should occupy at least two winter sessions and one summer session. It was important that the student should obtain his knowledge in the correct way and that the regulations and examinations should afford a safeguard against "cram."

Dr. Payne having withdrawn his amendment in favour of that proposed by Dr. Lee,

Dr. PYE-SMITH opposed the scheme, contending that it was not carrying out the spirit of the five years' curriculum, nor did he think it well that the medical student should be of the status of a schoolboy. He reminded the College that medical schools had made great sacrifices to equip and maintain admirably appointed laboratories and teaching staffs, on whom this proposed change would fall heavily.

Dr. COUPLAND would prefer the General Medical Council to be urged to postpone registration of medical students until these strictly preliminary scientific subjects had been passed. There would then be no longer need for the medical schools to provide instruction in elementary science, although of course ample scope existed for advanced instruction in these sciences as applied to anatomy, physiology and pathology.

Dr. PAYNE pointed out that the proposal of the committee was a new departure in its procedure. At present institutions are recognised as suitable for science instruction *before* registration, but now they were to be recognised as open to

students *after* registration. Was it seriously desired to make a board school a "medical school"?

Dr. NORMAN MOORE defended the procedure of the committee in recognising science schools and pointed out that whenever such recognition took place it was reported to, and sanctioned by, the College. The regulations of the examinations might be somewhat involved but they had to meet all exceptions to the general rule, nor was it desirable to be constantly changing them. The vast majority of the medical schools had approved of the proposed change. At present a student is encouraged to study physics, chemistry, and biology before entering at a medical school; he may pass the examination, but his five years' course only counts from the date of his entry at the medical school; in fact, he is in the same position as if he had deferred taking his science till then. And yet a student who passes the Preliminary Scientific (M.B.) Examination of London University can take his degree in four years. If the scheme were adopted the student would still have four complete years to enjoy the benefits of "collegiate influence." All that was proposed was that by recognising work at approved institutions carefully selected all students would be put on the same footing.

A division was then taken, when there voted for the amendment 17, against 30. The original proposition adopting the committee's scheme was then put and carried by a large majority.

The report of a special committee appointed on Oct. 28th, 1897, to consider the subject of elementary biology was then received, and its adoption was moved by Dr. GEE, chairman of the committee. A large number of teachers of the subject and school authorities had been consulted, and the committee recommended that in order that the time devoted to the study of biology should not encroach on that given to anatomy and physiology, the regulation for the second examination as to twelve months' dissection be modified by the addition of the following:—"This period of dissection must be subsequent to having received instruction in the subjects dealt with under sub-paragraph 2—(*a*) chemistry and physics and practical chemistry, and (*c*) elementary biology—in accordance with its regulations."

Dr. CHURCH seconded the motion, which was adopted, as was a further resolution to refer the report to the committee of management.

A communication was read from the Foreign Office, in reply to one from the President, on the subject of proposed legislative restrictions affecting foreign practitioners in Italy. The Marquis of Salisbury forwarded a copy of a despatch from H.M. Ambassador at Rome stating that the Italian Government do not contemplate any such change in the laws.

A communication was read from the Secretary of the Royal College of Surgeons of England enclosing a recent judgment of Mr. Justice Wright affecting the rights of the corporation.

Reports were read from the Finance Committee and from the Examiners for the Licence.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AN ordinary meeting of the Council was held on May 12th, 1897, the President, Sir WILLIAM MAC CORMAC, Bart., being in the chair.

Mr. W. D. Spanton of Hanley, Staffordshire, was introduced, signed the by-laws, and was admitted a Fellow of the College.

Mr. Percy Furnivall, F.R.C.S. Eng., was introduced and the President handed to him the Jacksonian Prize with the document declaratory of the award.

The Chairman of the Library Committee reported that Mrs. William Hunter had, at the suggestion of Mr. Thomas Bryant, presented to the College 43 volumes of works on medicine, surgery, and anatomy which formed part of the library of her husband, the late Dr. William Hunter of Rothesay, N.B., and which originally belonged to Surgeon-General William Hunter. The best thanks of the Council were voted to Mrs. Hunter for her valuable donation to the library.

A motion was brought forward that the Council should authorise a special gown to be worn by the Fellows of the College. The principle was approved and a committee was appointed to consider and report as to the form.

It was unanimously decided that an appeal should be entered against the judgment of Mr. Justice Wright and Mr. Justice Channell on the payment of corporation duty by the College.

A letter was read from the committee acting for the Fellows and Members of the College who signed the petition claiming the right of electing the representative of the College on the General Medical Council; with it was forwarded a copy of protest against the recent decision of the Council in course of signature by Fellows and Members. The Secretary was directed to inform the committee that their letter had been laid before the Council.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Crewe Urban District.—Dr. Meredith Young, in presenting his first annual report, congratulates the Crewe sanitary authority on the completion of the new isolation hospital—which, by the way, he regards as having prevented a severe epidemic of scarlet fever during the last quarter of 1897. Dr. Young advises the erection of a refuse destructor and of a public abattoir, and he insists strongly on the necessity for putting an end to the numerous old privies, &c., which still obtain in Crewe by substituting for them the water-carriage system. We note in connexion with the isolation hospital that no cases of scarlet fever are sent home until all otorrhœa, rhinorrhœa, or albuminuria has ceased. This is an excellent precaution, but we fear that in some few cases the patient may have to take up a very prolonged sojourn in hospital. Desquamation is, too, we are told, carefully sought for on the scalp, this being a locality which is regarded as especially liable to be overlooked. The question, however, suggests itself as to whether a slight scurfiness on the scalp after scarlet fever can be considered as desquamation. Doubtless the scalp desquamates early in the disease, but after the peeling process has been followed from the head down to the feet and the feet have been seen to pursue the usual desquamative process we should hesitate to retain a child for an indefinite period owing to what might be termed a "branny" desquamation of the scalp. However, too much care cannot be exercised in discharging patients after scarlet fever and it is well to err on the safe side. We are glad to see that the parents of discharged children are told that the hospital authorities cannot guarantee that the patients are in all cases free from infection. This practice may be profitably carried out at all fever hospitals.

Bournemouth Urban District.—The water company which supplies Bournemouth with water has, Mr. Philip Nunn reports, always afforded him every facility for making any investigation and he regards the care and precautions taken by the company as eminently satisfactory. In October last he, together with the borough engineer and the engineer of the company, visited the filtering beds, reservoirs, collecting areas, and pumping stations, and it must be a source of satisfaction to the public to know that everything was then well protected against possible pollution. A somewhat unusual form of nuisance had to be dealt with during the year under notice in the shape of the carcass of a dead whale some 70 ft. long, which was left high and dry on the beach. After considerable delay 25 tons of flesh and offal were removed to the borough destructor.

Bilston Urban District.—The danger of introducing measles into a hospital devoted to the treatment of scarlet fever was well illustrated in Bilston during 1897. One boy who had been admitted on November 5th with scarlet fever contracted a fatal attack of measles three weeks later, and a girl admitted on November 18th suffering from scarlet fever died from measles on December 18th. Cases such as these show the importance of adequate small ward accommodation at a fever hospital and also the necessity of maintaining a staff of nurses to enable complications of this nature to be adequately dealt with. Dr. Ridley Bailey, when he became aware of these two cases of measles, very properly refused to

admit any more patients until the whole building had been thoroughly cleansed.

St. Marylebone Sanitary District.—Mr. Wynter Blyth expresses regret in his current annual report that the trade are colouring butter and margarine by aniline dyes, instead of, as formerly, by anatto or other vegetable colours of a harmless nature. It would, he thinks, be difficult to take action in the matter unless the colouring agent could be shown to be harmful in minute doses, or rather if an accumulation of such doses could be proved to be detrimental to the human economy.

St. Mary's, Stoke Newington, Sanitary District.—Dr. Henry Kenwood, in referring to the control of measles and whooping-cough through the agency of information derived from public schools, regrets that the regulation of the London School Board requiring the teacher to notify to the medical officer of health when a child is excluded on account of infectious disease should not be regularly carried out. In this connexion it might perhaps be well if provisions such as those contained in Section 57 of the Public Health (Scotland) Act, 1897, were made applicable and a parent or teacher were fined for knowingly permitting a child to attend school who has been suffering from infectious disease or who resides in a house where such disease exists or has existed within a period of three months unless such child produces a satisfactory certificate from the medical officer of health.

Liverpool Port District.—Dr. E. W. Hope reports that 3879 vessels were examined by the port sanitary inspectors during the year 1897 and on board of 2064 of these one or another sanitary defect was discovered. This seems a very large percentage, but perhaps the vessels examined were selected by virtue of there being a probability in favour of some insanitary condition. It would have been some guide in this sense had the total number of vessels frequenting the port been given. There were 63 cases of infectious diseases landed from vessels arriving in the port during the year, 27 of the cases being of enteric fever and 20 of measles; only 3 cases of small-pox were recognised. Amongst the non-infectious cases arriving in the port were 14 of beri-beri, 30 of dysentery, 242 of malaria, and 39 of tropical anæmia. As regards emigration, Dr. Hope states that the diminution which began in 1891 was still further marked during 1897, the total number, 87,414, being 10,865 less than in 1896.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns 6291 births and 3577 deaths were registered during the week ending May 14th. The annual rate of mortality in these towns, which had been 18·4 and 17·4 per 1000 in the two preceding weeks, further declined last week to 16·6. In London the rate was 15·7 per 1000, while it averaged 17·3 in the thirty-two provincial towns. The lowest rates in these towns were 10·0 in West Ham, 10·2 in Brighton, 11·7 in Cardiff, and 11·8 in Bristol; the highest rates were 20·0 in Plymouth, 21·8 in Manchester, 22·1 in Bolton and in Halifax, and 22·6 in Liverpool. The 3577 deaths included 383 which were referred to the principal zymotic diseases, against 468 and 408 in the two preceding weeks; of these, 133 resulted from measles, 115 from whooping-cough, 50 from diphtheria, 32 from diarrhœa, 27 from "fever" (principally enteric), and 26 from scarlet fever. No death from any of these diseases was recorded last week in Plymouth; in the other towns they caused the lowest death-rates in Portsmouth, Swansea, Nottingham, and Huddersfield; and the highest rates in Bristol, Norwich, Liverpool, and Salford. The greatest mortality from measles occurred in Bristol, Derby, Halifax, and Bradford; and from whooping-cough in Leeds, Sheffield, and Salford. The mortality from scarlet fever and from "fever" showed no marked excess in any of the large towns. The 50 deaths from diphtheria included 20 in London, 6 in Birmingham, 4 in West Ham, 4 in Cardiff, and 3 in Burnley. No fatal case of small-pox was registered during the week under notice either in London or in any other of the thirty-three large towns; and no small-pox patients were under treatment in any of the Metropolitan Asylums Hospitals. The number of scarlet fever patients in those hospitals and in the London Fever Hospital at the end of last week was 2246, against 2334, 2302 and 2271 on the three preceding Saturdays; 229 new cases were admitted during the week, against 241, 205 and 209 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had been 274 and 226 in the two preceding weeks, rose again last week to 232, but were 81 below the corrected average. The causes of 44, or 1·2 per cent., of the deaths in the thirty-three towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bristol, Manchester, Salford, Leeds, and in sixteen other smaller towns; the largest proportions of uncertified deaths were registered in Leicester, Liverpool, Halifax, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had declined in the five preceding weeks from 24·2 to 21·7 per 1000, further fell to 19·8 during the week ending May 14th, but exceeded by 3·2 per 1000 the mean rate during the same period in the thirty-three large English towns. The rates in the eight Scotch towns ranged from 10·2 in Perth and 10·3 in Paisley to 19·6 in Dundee and 23·3 in Glasgow. The 325 deaths in these towns included 32 which were referred to measles, 26 to whooping-cough, 12 to diarrhœa, 6 to "fever," 4 to scarlet fever, and 3 to diphtheria. In all, 83 deaths resulted from these principal zymotic diseases, against 96 and 90 in the two preceding weeks. These 83 deaths were equal to an annual rate of 2·8 per 1000, which was 1·0 above the mean rate last week from the same diseases in the thirty-three large English towns. The fatal cases of measles, which had been 35 and 27 in the two preceding weeks, rose again to 32 last week, and included 27 in Glasgow, 2 in Edinburgh, and 2 in Dundee. The deaths from whooping-cough, which had been 34 and 29 in the two preceding weeks, further declined to 26 last week, of which 17 occurred in Glasgow, 5 in Dundee, and 3 in Edinburgh. The 6 deaths referred to different forms of "fever" showed a slight further increase upon recent weekly numbers, and included 5 in Glasgow, where 2 of the 4 fatal cases of scarlet fever were also registered. Of the 3 deaths from diphtheria 2 occurred in Dundee. The deaths referred to diseases of the respiratory organs in these towns, which had been 137 and 129 in the two preceding weeks, further declined to 109 last week, and almost corresponded with the number in the same period of last year. The causes of 30, or more than 5 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 25·4 and 24·5 per 1000 in the two preceding weeks, further declined to 22·5 during the week ending May 14th. During the past four weeks the death-rate in the city has averaged 23·9 per 1000, the rate during the same period being 16·9 in London and 18·6 in Edinburgh. The 151 deaths registered in Dublin during the week under notice showed a decline of 13 from the number in the preceding week, and included 7 which were referred to the principal zymotic diseases, against 9 in each of the two preceding weeks; of these, 3 resulted from whooping-cough, 2 from "fever," 1 from diphtheria, and 1 from scarlet fever. These 7 deaths were equal to an annual rate of 1·0 per 1000, the zymotic death-rate during the same period being 2·0 in London and 1·9 in Edinburgh. The fatal cases of whooping-cough, which had been 3 in each of the two preceding weeks, were again 3 last week. The deaths referred to "fever," which had been 2 and 3 in the two preceding weeks, declined again to 2 last week. The mortality from scarlet fever and from diphtheria corresponded with that recorded in the preceding week. The 151 deaths in Dublin last week included 38 of infants under one year of age, and 35 of persons aged upwards of sixty years; the deaths of infants showed a further increase upon recent weekly numbers, while those of elderly persons showed a further decline. Seven inquest cases and 4 deaths from violence were registered; and 65, or more than a third, of the deaths occurred in public institutions. The causes of 14, or more than 9 per cent., of the deaths in the city last week were not certified.

THE SERVICES.

HEALTH OF THE TIRAH FIELD FORCE.

DURING the late military operations on the North-West Frontier of India, extending from June 28th, 1897, to the break up of the Tirah field force in February, 1898, the maximum number of British troops employed at any one time numbered some 18,000. The very alarming reports as to the extent of invaliding appear to have been on a par with others *ad captandum vulgus*. Up to April 12th, 1898, only 489 men passed through Deolali invalided to England, including 106 from gunshot wounds and 163 from ague; 202 represent all other diseases. 44 of the latter were the results of dysentery, 29 debility, 19 enteric fever, 17 secondary syphilis, 14 remittent fever, 10 diarrhœa, 8 rheumatism, and only 2 from heat stroke, and 1 from bronchitis. The very low percentage speaks volumes for the endurance of the troops, for the sanitary arrangements made by all departments and for the treatment of the sick in the field and general hospitals of the army; the figures are in marked contrast to those of the Crimean period of forty years ago, when "light equipment" was in vogue *de rigueur*, and a veteran force of 27,000 men landed on Sept. 19th, 1854, without ambulances, field hospitals, or a trained medical corps, to be reduced at the end of two months to 11,000 men fit to carry arms.

NAVAL MEDICAL SERVICE.

Fleet-Surgeon George W. Bell to the *Crescent*. Staff-Surgeons: Alfred J. Pickthorn to the *Marathon;* William M. Craig to the *Galatea*, and John J. Dinnis to the *St. Vincent*. Surgeons: Shirley H. Birt to the *Crescent*, Arthur E. Kelsey to the *Collingwood*, lent to the *Devastation*, temporary.

ARMY MEDICAL STAFF.

The under-mentioned Surgeon-Captains are appointed to be Surgeon-Majors: Charles G. Woods and Henry T. Baylor. Surgeon-Major Hall has left Woolwich for Jamaica. Surgeon-Major Elderton has assumed medical charge of women and children, Marlborough Lines, Aldershot. Surgeon-Major Younge has arrived for duty in the Thames District, and Surgeon-Major H. J. Barratt has been posted to the Station Hospital, Canterbury, for duty.

INDIA AND THE INDIAN MEDICAL SERVICES.

Brigade-Surgeon-Lieutenant-Colonel Alexander Crombie, M.D., Bengal Establishment, retires. The services of the undermentioned officers are replaced at the disposal of the Government of Bengal: Surgeon-Major Grainger (Bengal), Surgeon-Captain Brown (Bengal), Surgeon-Captain Green (Bengal), Surgeon-Captain Moir (Bengal), and Surgeon-Captain Stevens (Bengal). The services of Surgeon-Major Cunningham (Bengal) are replaced at the disposal of the Government of the Punjab. The services of Surgeon-Major Pemberton (Madras) are replaced at the disposal of the Government of Madras. Surgeon-Lieutenant-Colonel McCloghy and Surgeon-Captain Arnim have respectively delivered over and received charge of the office of the Deputy Sanitary Commissioner, Sind Registration District. Brigade-Surgeon-Lieutenant-Colonel Sir. A. S. Lethbridge, K.C.S.I., and Brigade-Surgeon-Lieutenant-Colonel D. D. Cunningham, C.I.E., receive the two extra pensions of £100 each available for the Bengal Medical Establishment for the year 1898–99, and Brigade-Surgeon-Lieutenant-Colonel F. H. Blenkinsop and Brigade-Surgeon-Lieutenant-Colonel J. Arnott the pensions due to the Madras and Bombay Establishments respectively.

MILITIA MEDICAL STAFF CORPS.

Surgeon-Lieutenant H. E. Mortis to be Surgeon-Captain.

VOLUNTEER CORPS.

Royal Engineers: 1st Middlesex: Surgeon-Major R. M. P. Low, M.B., resigns his commission; also is permitted to retain his rank and to continue to wear the uniform of the corps on his retirement. *Rifle:* 1st Volunteer Battalion the King's (Liverpool Regiment): Keith Waldegrave Monsarrat, M.B., to be Surgeon-Lieutenant. 1st (Exeter and South Devon) Volunteer Battalion the Devonshire Regiment: Ransom Pickard, M.D., to be Surgeon-Lieutenant. 3rd Lanarkshire: Surgeon-Major A. Napier, M.D., to be Surgeon-Lieutenant-Colonel. 1st Cinque Ports: Henry James Holman to be Surgeon-Lieutenant. 5th (West) Middlesex: Charles Arthur Goulett to be Surgeon-Lieutenant.

VOLUNTEER MEDICAL STAFF CORPS.

The Manchester Companies: William Bridgett Pritchard to be Surgeon-Lieutenant.

THE SPANISH-AMERICAN WAR.

Notwithstanding that the newspapers devote columns to the subject of the war between Spain and the United States there is really little or nothing to be chronicled in the way of reliable or important news. With Admiral Cervera's departure with his Spanish squadron from Curaçao we, like the squadron, are simply at sea, the only difference being that the Spanish Admiral knows whither he is going and why and we do not! Attempts will be made by the American fleet to intercept him, but it is simply a matter of conjecture whether they will be successful or not, or when and where the big naval battle alleged to be looming in the near future will take place, or even whether it will occur at all. It seems clear that the Americans have for the present, as we surmised would be the case, relinquished the idea of sending a large force to Cuba as impracticable, on account of the transport and sanitary difficulties in the way. The United States must have command of the sea before doing so, as probably no one knows better than Captain Mahan himself. It will in the meantime subject the naval, military, and medical authorities of the States to a great strain to equip and transport the large land force required by Admiral Dewey for the occupation of Manila. A large hospital and sanitary service will be required to accompany the force proceeding there, for the Americans are quite alive to the fact that there may be much inefficiency from sickness among the troops for whom adequate preparations will have to be made.

THE ROYAL MILITARY TOURNAMENT.

The opening of the Royal Military Tournament at the Agricultural Hall, Islington, was preceded by a private rehearsal and luncheon on Wednesday last, May 18th. As we announced last week the pageant this year is called "Shoulder to Shoulder" and is representative of the sister services who fought side by side at Cadiz in 1596 and at Gibraltar, Alexandria, and El-Teb at periods between 1704 and 1884. Those who are responsible for the arrangement of this excellent spectacular performance certainly deserve the appreciation which the audience showed with regard to this part of the programme. The inclusion of Piper Findlater among the *personnel* of the pageant was a happy idea. The ever-popular musical ride by the Royal Horse Guards (the Blues) was received with hearty applause, as was also the musical drive by G Battery of the Royal Horse Artillery. In this some new and daring movements have been introduced. The displays by the Army Gymnastic Staff and class of non-commissioned officers under instruction at the Gymnasium, Aldershot, were well received. The rehearsal included tent-pegging, jumping, the *mêlée*, &c., and concluded with a realistic representation of the capture of Benin. That the present Tournament will be a success there can be no doubt.

SOLDIERS' AGES AND FLAT OR DEFORMED FEET.

With regard to the alleged and actual ages of recruits and young soldiers we can understand that, according to a recent War Office Order, a commanding officer has to determine the point in consultation with a medical officer as to whether there are sufficient physical signs present for believing a man to have really reached the age of nineteen years; but as regards another ruling we confess we do not quite appreciate the force of it. The Secretary of State for War, we are told, has had his attention drawn to the number of men invalided from the army on account of flat or deformed feet. In future such men are to be sent to the gymnasium to see whether the physical defect cannot be remedied or improved by a suitable course of physical exercise. Assuming that the case be really one of flat or deformed feet we are very sceptical about the removal of the defect by this means. It depends of course upon its nature and extent whether improvement can be effected in this way—especially at a soldier's age. Care in examining recruits and attention to the careful fitting of soldiers' boots strike us as a more likely method of overcoming the evil.

DEATHS IN THE SERVICES.

Staff-Surgeon Josiah Austen, on May 2nd He was appointed surgeon in the Navy in 1852 and was promoted staff-surgeon in 1861.

Surgeon-General James Irvine, Bengal Army (retired), on May 3rd, at Clifton, Bristol, in his seventy-sixth year.

THE LATE INDIAN FRONTIER WAR.

Everything remains quiet on the frontier and in the Khyber. Some sickness is reported, however, among the British troops at Jamrûd and Bara.

Surgeon-Major-General S. A. Lithgow, M.D. Edin., C.B., D.S.O., has been selected for the appointment of honorary physician to the Queen, rendered vacant by the death of Surgeon General S. Currie, M.D. Edin., C.B. Surgeon-Major-General Lithgow was appointed to the army in February, 1855, and during his long service has been several times on active service in the field, including the Indian Mutiny, 1857–59. He took part in the Soudan Expedition of 1884–85 on the Nile and was principal medical officer on the lines of communication. He was mentioned in despatches, received the medal and clasp, and was created a C.B. He was again in the Soudan in 1885–86 and was mentioned in despatches and received the Distinguished Service Order. In 1890 he took part in the operations of the Zhob Field Force in India and was again mentioned in despatches.

Surgeon-Major A. C. A. Alexander, Coldstream Guards, is the Principal Medical Officer in charge of the Royal Military Tournament at the Agricultural Hall, and he is assisted by Surgeon-Captain G. W. Tate, M.B., A.M.S. Veterinary Major Rowe, A.V.D., is in charge of the horses.

Correspondence.

"Audi alteram partem."

THE PROSECUTION OF REGISTERED PRACTITIONERS BY THE GENERAL MEDICAL COUNCIL.

To the Editors of THE LANCET.

SIRS,—The recent prosecution by the General Medical Council of Mr. H. K. Hunter, L.S.A. Lond., of Gamlingay, Cambridgeshire, for assuming the titles "Physician and Surgeon" must have come as a surprise to most members of the profession. It undoubtedly seems strange that the Council should use its funds in prosecuting a registered medical practitioner whilst hosts of unqualified persons are permitted to practise medicine and surgery with impunity. After reading the report of the case of the proceedings in the *Times* of April 8th last I communicated with the Registrar of the General Medical Council, asking for information as to who ordered the prosecutions, as I had no recollection of the facts of the case having been brought before the Council. From him I learnt that the General Medical Council, when *in camerâ* on Nov. 25th of last year, directed, on the recommendation of the Penal Cases Committee, the prosecution under Section 40 of the Medical Act of 1858 of certain persons, amongst whom was Mr. H. K. Hunter.

I shall feel obliged if you will permit me to state in your columns that I had not the slightest idea that the name of a registered practitioner was among those recommended for prosecution by the Penal Cases Committee. I was under the impression that the persons reported upon by the committee were those only whose names had already been removed from the Medical Register and still continued to practise and use medical titles. Had I known that the name of a registered practitioner was included in the list I should have dissented from the recommendation. I have reason to believe that many of the other members of the Council—the Penal Cases Committee excepted—were likewise ignorant of the fact that Mr. Hunter was a registered practitioner. This, however, I freely confess does not relieve us of our responsibility as being parties to the action. We ought not to have assented to the recommendation of the Penal Cases Committee without having had all the facts of each case before us. That the Council should have been placed in such an unfortunate position indicates that our methods of procedure are faulty. Instead of referring cases reported to the Council for prosecution to a small committee, it would, in my opinion, be far better that the cases should be considered by the Branch Council for the division of the kingdom in which the persons complained of practise. It is therefore my intention at the forthcoming session of the Council to propose that the Penal Cases Committee be not reappointed, and that penal cases be hereafter referred for consideration and report to the respective Branch Councils. Should this proposal be adopted we may hope that the law officers of the Council may not again be called upon to prosecute a registered practitioner under similar circumstances.

I am, Sirs, yours faithfully,

GEORGE BROWN,
Direct Representative for England and Wales.

Gibson-square, Islington, N., May 17th, 1898.

"A METHOD OF EXPOSING AND OPERATING ON THE KIDNEY WITHOUT DIVISION OF MUSCLES, VESSELS OR NERVES."

To the Editors of THE LANCET.

SIRS,—A few days ago I read in a paper by Joseph Price a quaint sentence which accurately describes a good deal of what is published now: "Frequently some one of our medical or surgical brothers comes running out of the bushes crying, 'I have found something.' It is usually a bug, an antitoxin, or a new method."

I can neither confirm nor correct Mr. Mayo Robson's statement that Mr. Greig Smith approved of the principle of exposing the kidney without cutting muscular fibres, but as I taught him to open the abdomen by splitting open the muscular sheath and separating the fibres of the *rectus* I have no doubt he also approved of and practised what I also taught him, to open the loin similarly, whether operating on the kidney or the colon, by what Mr. Mayo Robson believes is a new method. If its history is a matter of importance then I ought to put it on record that I was taught it in Edinburgh by the late McKenzie Edwards as the best way to imitate a sphincter in colotomy thirty-five years ago and that I have practised it uniformly ever since, with an incision, I should say, about one-third the size indicated by Mr. Mayo Robson.

I am, Sirs, yours faithfully,

Birmingham, May 14th, 1898. LAWSON TAIT.

"THE DANGER OF ASPIRATING THE LIVER."

To the Editors of THE LANCET.

SIRS,—Surgeon-Lieutenant-Colonel Hatch, I.M.S., has done well in drawing attention in the *Indian Medical Gazette* for April, 1898, to the possibility of aspiration of the liver producing a fatal hæmorrhage into the cavity of the peritoneum. This important fact is but little known and has been seldom referred to in writings on the treatment of liver abscess. Surgeon-Lieutenant-Colonel Hatch recommends caution in the operation of aspiration of the liver for diagnosis of abscess; but you go further and state that "the operation offers no advantages to compensate for its undoubted risk" and recommend its total disuse.[1] This view will not, I believe, commend itself to the majority of surgeons and, if adopted, will result in patients dying from liver abscess unrelieved because their condition remains undiagnosed. The advantages of the operation are the certainty of diagnosis as to the presence of an abscess and its position if a positive result be obtained, and its almost certain absence if pus be not reached on the insertion of the needle at three or four situations. The books notwithstanding, there are no symptoms or physical signs on which the surgeon can depend for indicating the necessity of operation in cases of suspected abscess of the liver; perhaps of the latter œdema of the skin is the most valuable, but it is very seldom apparent, not oftener than in 4 or 5 per cent. of the cases—a sense of fluctuation may be left out of consideration, as it is hardly ever perceptible. I have discovered by means of aspiration liver abscess in cases where the classical symptoms of this complaint were all absent, and where only pain over the liver and the patient's history warranted a bare suspicion of its presence, and I have found it on post-mortem examination in cases which during life exhibited no sign of it. Probably no disease presents cases in which diagnosis is more difficult than it is in some

[1] THE LANCET, May 14th, 1898, p. 1343.

cases of liver abscess, and in these "prospecting" the organ with an aspirator affords the only certain data on which to form an opinion. I have treated a large number of cases (over 150) in which abscess of the liver was present or suspected, and my routine plan has been to aspirate first at one or more points and then to operate on a positive result being obtained. In those cases in which pus was not reached no evil effect was ever perceived, the only result being a very considerable decrease of the pain previously felt, and this whether the amount of blood removed was great or small. The needle employed should no doubt be small, and that it be too narrow to permit the pus to flow freely, through it in some cases is hardly an objection, because even under these circumstances sufficient for merely diagnostic purposes may be obtained on separating the needle from the indiarubber tube and blowing its contents on to the palm of the hand.

In the face of the cases related by Surgeon-Lieutenant-Colonel Hatch and of others one must admit a certain amount of risk from aspiration of the liver, but the ratio of fatal cases to the total number treated is almost infinitesimal and should be disregarded. The fact that THE LANCET is read all over the world by medical officers who are likely to have these cases to treat must be my excuse for asking you to give space to this letter.

I am, Sirs, yours faithfully,

W. F. STEVENSON, Surgeon-Colonel A.M.S.,
Professor of Surgery, Army Medical School.

Netley, May 15th, 1898.

THE POLICE AND THEIR AMBULANCE ARRANGEMENTS.

To the Editors of THE LANCET.

SIRS,—The Home Secretary's reply in the House of Commons to a question about first aid in London, as reported in THE LANCET of May 14th, seems to me to deserve more attention than it has yet met with at the hands of the press, since it affects in a marked degree the safety of all those who daily pass along our thoroughfares. With reference to the ambulance work rendered by the police on the occasion of the collapse of a building in Westminster on April 21st the following undisputed facts may be noted. No first aid was rendered on account of "the presence of a great and excited crowd" (springing up, I suppose, instantaneously); cabs were used to convey the injured to the hospital, for there could be no time to get any other means of conveyance, as they were removed to the hospital and under treatment within four minutes of the accident. Out of the 70 constables present who, we are told, were competent to render first aid not one was called upon to treat a single case.

It is superfluous on my part to comment upon the curious reason given by the police for not rendering first aid or upon the hasty method of getting these poor injured men to the hospital, as both are exactly upon all fours with the ordinary manner adopted by the police in treating the every-day accidents in our streets. They only bring out in strong relief the main fact that no ambulance work of any consequence is carried out by the police in the case of street accidents. If ever there was a case in which first aid ought to have been promptly rendered the catastrophe at Westminster was the one and it is not creditable to this city that the police ambulance arrangements should turn out to be such a failure.

I am very much afraid that the remarks of the Home Secretary were not thoroughly understood by the House of Commons or the Members would never have cheered the admission that no first aid was rendered in a case where it was so essentially required. Surely the time has now arrived when the Government should make some attempt by inquiry or otherwise to discover what is wrong and why we cannot have some more efficient system of first aid employed in our streets. During this year, judging from previous statistics, I estimate there will be 12,000 accidents in the streets of London (including the City), and, as you have stated elsewhere,[1] these only form a small portion of the cases which would require assistance and I ask, therefore, in the name of humanity, the suffering humanity that is before our eyes, whether you cannot do something to draw the attention of the Government to this crying want. Your power is great and could hardly be used in a better cause.

I am, Sirs, yours faithfully,

HEATON C. HOWARD.

[1] Hospital Sunday Fund Supplement, May, 1895.

THE VICE-PRESIDENCY OF THE ROYAL COLLEGE OF SURGEONS IN IRELAND.

To the Editors of THE LANCET.

SIRS,—I desire to intimate through the columns of THE LANCET that I have relinquished the intention which I had formed to seek the Vice-Presidency of the Royal College of Surgeons in Ireland at the approaching election in June next. When I expressed to the Fellows my determination to offer myself for that office I felt that my long service to the school and College as an examiner and Councillor and my seniority as a surgical teacher and as a hospital surgeon might reasonably deserve recognition by the Fellows and that I might hope to be honoured with election to the office which I seek. Unhappily, personal and domestic circumstances prevented me from giving prominence to my candidature until others had occupied the ground in some degree, and as a contest is extremely distasteful to me and in my opinion is not to the advantage of the College I have thought it best to refrain from presenting myself for the vice-chair until the next vacancy may occur. I desire, however, to assure the Fellows that under any circumstances I shall do so when that time arrives and that meanwhile I shall hope to retain my seat on the Council, for re-election to which I now offer myself. With this assurance before them I trust that my friends and supporters will not be induced to pledge their votes to any other candidate for a succeeding vice-presidency.—I am, Sirs, yours faithfully,

L. HEPENSTAL ORMSBY, M.D. Dub., F.R.C.S. Irel.

Merrion-square, Dublin, May 16th, 1898.

"THE DIPLOMA OF THE APOTHECARIES' SOCIETY."

To the Editors of THE LANCET.

SIRS,—Whilst agreeing with Dr. Bateman that Mr. Victor Horsley is an admirable Direct Representative, and likewise agreeing in some degree with his remark as to the "unwisdom of the prosecution" of the L.S.A. London for assuming the title "Physician and Surgeon"—as after all said there is scarcely more than a technical distinction between the L.S.A. and multitudes of others who adopt the same title—be it said to the credit of the General Medical Council, however, that they have got on the right scent, as an intolerable amount of snobbism exists at the present day with regard to the use, or rather abuse, of this title. Until a comparatively recent date this kind of braggadocio was confined to the slums, whereas now the infection has spread to innumerable refined and suburban localities. One of these I happen to know where three medical men, respectively graduates of a university, have in addition to the ordinary plate representing their qualification another plate underneath especially limited to the title, "Physician and Surgeon"; and as to another instance I know an M.R.C.S. and L.R.C.P. Edin. who, in giving a testimonial in a local paper, inserted "Physician" after his name, ignoring altogether the "Surgeon."

I am, Sirs, yours faithfully,

London, May 15th, 1898. M.R.C.S., L.R.C.P. EDIN.

THE MILITARY HOSPITAL AND SANITATION AT CADIZ.

(FROM OUR SPECIAL CORRESPONDENT.)

IN face of the trouble which is besetting the whole Spanish nation it is hard to criticise severely the shortcomings which unfortunately are but too evident. As Cadiz is the nearest Spanish port to Cuba and America I naturally imagined that the town would be in a state of feverish activity. I have nothing to do with the military aspect of the question, but from the sanitary point of view Cadiz is the natural landing place for the sick and

wounded from the seat of war. Consequently I imagined that members of the Red Cross fraternity would be seen everywhere making extensive preparations, and my first care on reaching Cadiz was to call on the president of the local Red Cross Society. My consternation may, however, be better imagined than described when I was told very quietly that the association did not exist as an active body in times of peace. This was April 25th, and that same evening it was proposed to hold a meeting to see if anything could be done. Naturally it is now too late to do anything which will be really effective. As the Red Cross Society was in this passive condition I imagined that in any case the ordinary military services would be in active working order. Consequently I went to the military hospital, but here also I found the same state of stagnation—indeed, it was all so bad that I felt quite discouraged and incapable of entering into details. Here and there a ward was shown to me as being "a little better," and in a yard there were a few men engaged digging up the earth for the purpose of laying a drain which it was imagined would remove some of the stench arising from the latrines. But the drain was a square brick drain and therefore is likely to contaminate the surrounding subsoil and cannot, by reason of its shape, be self-cleansing. On all sides in the building there were rafters and angles and dusty corners. The one redeeming feature is the fact that there is some open ground and some old structures are being demolished. Also just outside the hospital the construction of a large theatre has been commenced and abandoned. The roofless walls would make a fine enclosure and give shelter from the wind in cold weather and shade in hot weather. This would be an excellent place for the erection of tent hospitals. The one thing to be done is to evacuate all, or nearly all, the wards. Then all the open spaces should be utilised to establish tent hospitals. Place the wounded under canvas and then they will enjoy efficient ventilation. All the existing drains and closets should be closed up after pouring down the greatest possible quantity of disinfectants. The tent hospitals should be provided with portable earth closets; the soil to be removed and fresh earth supplied every day. By thus saving the patients from the hospital, camping them out in the open air, and breaking off all connexion with existing drains some hopes could be entertained of their recovery. What is, however, so wonderful is the fact that some of the patients actually recover in spite of the insalubrious condition of this military hospital. Such a fact speaks volumes in favour of the Spanish soldier. He is so abstemious, so steady, so sober, that it is very difficult indeed to kill him. British troops would die in such a hospital, but some, at any rate, of the Spanish soldiers survive. It is impossible not to admire these patient, all-enduring soldiers, but is it right to take advantage of these qualities and make their wonderful vitality an excuse for gross neglect? During the siege of Paris in 1870–71 it was found that the best results from operations, the fewest cases of blood-poisoning, &c., occurred at the American ambulance and this was an ambulance established under canvas. In spite of the Siberian winter which then prevailed the wounded who were nursed under canvas prospered and there were a greater number of recoveries at the American ambulance than at other ambulances where the wounded were treated within the walls of houses. Now, in the poverty-stricken condition of Spain it is useless to propose the building of model hospitals. Besides, even if the means were found for such, hospitals could not be built in time to be of service for the present war. On the other hand, tents are cheaper and can be erected rapidly. Also, in the event of a bombardment, a shell falling on a tent hospital would not do as much mischief as if it fell on a hospital of stone or brick. Now, according to certain telegrams, it would seem as if a naval engagement might take place near Cadiz. This may be followed or accompanied by a bombardment of the town. The danger rests in that case with the splinters as well as with the shell. A wall is of no use against a shell; the fragments of the masonry only add to the number of the splinters. The resistance which the wall offers causes the shell to burst; but a shell would pass through the canvas of a tent without bursting. If, however, a shell bursts outside a hospital then a masonry wall is of use in sheltering the patients and attendants from the fragments. Consequently a tent hospital surrounded by walls represents perhaps the ideal of safety if the walls are not too near to the tent. The shell striking the wall placed at a little distance from the tents bursts in the wall and no one is hurt. If the shell does not strike the wall it may pass through the tent, but without bursting, and would therefore cause no damage unless it happened to hit someone, which is the lesser probability. The danger is due to the numerous fragments rather than to the unexploded and entire shell. In view of these considerations, and as it is absolutely impossible to rebuild the Cadiz military hospital in time to be of service during the present war, the one thing to be done is to establish tent hospitals in the surrounding open spaces and to put the patients under canvas. In so beautiful a climate as that of Andalusia this would be no hardship and financially this would also be the very best way out of the difficulty.

As for Cadiz itself, the town consists of a number of narrow, ill-drained streets. An elaborate plan for the drainage of Cadiz was prepared in 1893. It has remained in the pigeon holes of the municipality ever since. There I found it neatly packed in cardboard with red ribbon bows. It looked very pretty and doubtless it is a very good scheme, but it will be time to discuss its merits when there is a serious prospect of its being carrried out. Moreover, I was not able to meet with anyone who seemed capable of giving me a clear account of what it was proposed to do, and from all I heard and saw I was convinced that Cadiz would remain in its present insalubrious condition for some time to come. Of this unwholesome state of affairs I had ample opportunity of judging, for there had been a storm and the sewers, under the pressure of the water, emitted the foulest odours all over the town. It seemed as if hundreds of cesspools were being emptied simultaneously and, as bad sewers are little better than cesspools, the storm waters were actually performing some such Augean task. Yet, notwithstanding all this, when the storm was over the air became so limpid, the sky and waters so blue, that all nature seemed to smile with peace and plenty. Fruits and flowers abounded on all sides and the orange blossoms and bushes of heliotrope, were so bright and sweet that they soon made me forget the stench of the overloaded sewers. But a little care, a slight knowledge of the elementary principles of hygiene and their practical application to everyday life, and what a perfect and ideal town such a place as Cadiz would become. To think that there should be so much foulness, such filth and bad sanitation just where Nature shows herself in all perfection. Let us hope that that drainage scheme, so carefully tied up with red ribbon, will not slumber very many years more in the archives of the Cadiz *Ayuntamiento*.

Cadiz, May.

NOTES FROM INDIA.

(FROM OUR SPECIAL CORRESPONDENT.)

The Outbreak of Plague in Calcutta.—Lessons of the Plague.—Increase in Kurrachee.—The Plague among Rats.

NOTWITHSTANDING the attempts of the authorities to keep undeclared the cases of plague in Calcutta the outbreak is now unmistakeable. The occurrence of the disease in the metropolis of India is a national calamity, because it seems almost bound to spread not only throughout the city itself but among the 80,000,000 people inhabiting Lower Bengal. The conditions of life of the great mass of the people are very similar to those of the people in Bombay and the natives live among equally insanitary surroundings. The mortality from plague in Bombay during the eighteen months of its visitation may be put down at one fortieth of the population, and the ratio of mortality among those attacked averages nearly 75 per cent. Bombay, therefore, has not suffered severely compared with the results of epidemics elsewhere, but the damage done to trade has been enormous. This injury has in all probability been greatly increased by the adoption of a system of quarantine—a system which has over and over again been condemned and which has once more been found to be valueless. The plague in Bombay has also taught other lessons. It has been found that the discovery of cases is most difficult notwithstanding the house-to-house visitation and the other measures adopted to obtain this result. If, therefore, notification be so imperfect the isolation of a percentage of plague cases only must cause this measure to fall very far short of completeness. Segregation of "contacts" again being dependent upon the other

measures must be still less successful. These lessons from the plague in Bombay have been learnt by the authorities in Calcutta and it has already been intimated that the severe repressive measures carried out by the Plague Committee in Bombay will not be adopted. Emptying infected houses and giving the occupants the option of inoculation or segregation promise a much better hope of success. The benefits of inoculation cannot now be disputed, and while for many reasons anything like compulsory inoculation should not be introduced, yet very considerable pressure can be exercised to further its adoption. If it be brought directly home to the minds of the people that it is less than the other evils of repressive sanitary measures the people will probably agree to it. This can be done by giving to an inoculated person the privilege of unrestricted freedom. Such a course would not only tend to make inoculation popular but must prove of immense benefit in many other directions.

The plague in Bombay city itself is rapidly on the decline. Some of the outlying districts prevent the mortality falling to its normal limits. There is reason to believe that the death-rate from so-called fevers is distinctly lowered in the presence of plague. The lowered birth-rate in Bombay, as well as in Poona, during the plague outbreaks is explained by the exodus of women to surrounding districts. In the Punjaub and in Kurrachee the disease seems to be spreading considerably. In the latter city from 30 to 40 fresh cases are being discovered daily. The mortality is very high. Some of the English medical men and nurses have recently been sent to give urgently required assistance and a large staff of practitioners and nurses are about to leave for Calcutta in anticipation of the great demands likely to be made upon their services. These recent outbreaks in Kurrachee and Calcutta, as well as the extension of the epidemic in other districts, conclusively show that the advent of the hot season has little influence in restraining the virulence of this disease. It occurs on high ground as well as at the level of the sea, on dry ground as well as in towns which are more or less waterlogged, in hot weather as in winter, and in the wet season as at other times of the year. The coincidence of the disease occurring in the rat at the commencement of an outbreak among human beings is the one prominent factor amongst the observed associated phenomena.

BIRMINGHAM.

(FROM OUR OWN CORRESPONDENT.)

Deaths under Chloroform.

A CASE of death under chloroform occurred at the General Hospital on May 3rd and was subsequently the subject of an inquiry by the coroner for the city. The patient was a child, aged ten years, the operation being for an affection of the nose and throat. Dr. Sidney Haynes in his evidence stated that he had examined the child previously and had found no contra-indication to the use of chloroform. He had administered it in about 6000 cases and this was the first death which had happened under his care. The coroner (Mr. Bradley) in addressing the jury said that according to a medical paper he had before him there appeared during the last few years to have been an alarming increase in the number of deaths taking place whilst patients were under anæsthetics. In 1887 the number of deaths was 16, whilst in 1897 they reached 96. The jury returned a verdict to the effect that the deceased died whilst under an anæsthetic which was properly administered. At the same time they thought that in such cases parents should be informed that an anæsthetic was proposed to be used and their consent in writing should be obtained. The question was considered by the medical committee of the hospital subsequently. The number of deaths occurring in the hospital was stated to have been in 1892, 1; in 1893, 2; in 1894, 2; in 1895, 2; in 1896, none; in 1898, 2—in the first three months of the year. Obviously the number of operations in which anæsthetics are administered should be considered in any statistics of this kind. Letters have been written to the daily press upon the subject by medical men, a form of discussion to be deprecated and one calculated to raise undue alarm in the public mind. The medical committee have taken the wisest course in appointing a subcommittee to inquire into the whole subject of purity of the anæsthetic used, the dosage, and the conditions generally affecting the issue.

Boric Acid and Butter.

A prosecution by the Birmingham Corporation was conducted at the police-court on May 10th against a tradesman for selling butter containing boric acid. Half a pound of the butter which had been purchased contained boric acid at the rate of 70 gr. to the pound. Dr. Hill, the public analyst, stated that boric acid had powerful physiological effects; it created irritation of the stomach, was a depressant of the heart, and produced congestion and sometimes hæmorrhage of the kidneys. Out of 37 samples of food which he had analysed twelve months ago 20 were adulterated with boric acid. Dr. A. P. Luff, analyst to the Home Office, said that he was decidedly of opinion that 70 gr. of boric acid to the pound in butter would be noxious to health. A fine of 20*s.* and costs was imposed, the costs to include £5 towards the expenses of the prosecution. The question resolved itself into one of amount. Can 1 per cent. of boric acid, as in this instance, be looked upon as excessive, so as to be injurious to health? The Bench decided in the affirmative, and whatever the effects of this dose might be in the quantity of butter eaten they showed that the adulteration could not be effected without breaking the law as they interpreted it on this occasion.

Extraordinary Deaths.

On May 11th, an inquest was held at Dudley on the body of a woman aged sixty-five years, who met with her death in an exceptional manner. After kneeling at the grave of her brother in the cemetery she made an effort to rise, but in doing so fell into the vault over which she was kneeling and disappeared from view; when taken out she was dead. Her weight was 16 st. 12 lb., the vault was from 8 to 9 ft. deep. On May 4th an inquest was held on the body of a woman, aged thirty-three years, the subject of delusions. The deceased was found on the floor of the house dead, her clothing saturated with water, and a pool of water around. There was nothing found to account for her condition. The canal was a quarter of a mile away. The medical man who made the post-mortem examination said that he came to the conclusion that the deceased had died from asphyxia caused by water—practically drowning. He added that according to an American authority a case was recorded where a person who had been immersed in water had recovered sufficiently to walk a considerable distance and had then died. From the condition of the deceased's body and clothing he thought that she had been completely immersed in water. The jury found that death was due to drowning but that there was no evidence to show how the drowning was caused—a conclusion which must be viewed as exceptional in the history of deaths from drowning.

May 17th.

LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

Farewell to the late Principal of University College, Liverpool.

THE leave-taking of Dr. G. H. Rendall, the late principal of University College, Liverpool, which took place on May 6th in the Arts Theatre of University College, was a highly interesting ceremony. The Earl of Derby, the president of the college, took the chair on the occasion and the meeting was also graced by the presence of the Lord Mayor of Liverpool and the Lady Mayoress; members of the college council; members of the senate and professorial staff, among which the medical element was largely represented; and also by numerous prominent citizens. Eulogistic references to the many high qualities possessed by the late principal were made by the Earl of Derby and Mr. E. K. Muspratt, the vice-chairman of the council of the college. Not the least interesting feature of the ceremony was the address presented to Dr. Rendall by the students' representative councils on behalf of the male and female students of the college. The president asked Dr. Rendall to unveil a medallion memorial to the late Mr. George Holt, a great benefactor of the college. The public farewell to Dr. Rendall was concluded by a banquet in the evening at the Adelphi Hotel, which was again presided over by the Earl of Derby. The company was large and representative and the

proceedings passed off in the most harmonious manner. The toast of "Victoria University" was proposed by Ian Maclaren (the Rev. Dr. Watson) in a felicitous speech, and was replied to by Principal Boddington, vice-chancellor of Victoria University.

Death of Mr. David Garnet Hurter, M.B., Ch.B. Vict.

The death of Dr. D. G. Hurter at the Liverpool Royal Infirmary on May 11th from typhoid fever, contracted while actively engaged in the discharge of his duties as house physician, cast a gloom over the entire hospital and medical school. Only in July last had young David Hurter obtained honours in the final examination for the M.B. Vict., and his subsequent work in the hospital fully bore out what his student life had shown him to be—a man of original mind and tireless industry. Born in 1875, he was educated in Switzerland and subsequently in Liverpool, joining the Liverpool Medical School in 1892. Among the distinctions obtained during his student career were gold medals in anatomy and medicine, a silver medal in forensic medicine, and certificates of honour in physiology and physics. In October last he was appointed house physician at the Liverpool Royal Infirmary, as stated in THE LANCET, and only last month he was appointed house surgeon, a post he was unhappily never destined to hold. On Sunday, May 15th, a memorial service was held in the chapel of the Royal Infirmary, which was numerously attended by the members of the staff and many of the deceased's colleagues and friends, by all of whom his early death is deeply lamented.

Death of Mr. Thomas Gordon, M.A., M.D. Edin.

The death of Dr. Thomas Gordon, which occurred on May 11th from typhus fever after an illness of ten days, came as a great surprise to his numerous friends and patients. Dr. Gordon graduated at the University of Edinburgh in Arts and Medicine. He was the youngest son of the late Mr. John Gordon of Montrose, N.B., and after practising for a short time in London removed to Broadgreen, near Liverpool, eventually settling down in Liverpool. The deceased was well known in golfing circles. How and where he contracted the illness which resulted in his death at the age of forty-five years has been a matter of anxious investigation on the part of the health authorities.

Ladies' Charity and Lying-in Hospital.

The vacancy in the outdoor medical staff of the Ladies' Charity and Lying in Hospital has been filled by the appointment of Dr. William Tweedale Thomson, a graduate of the University of Edinburgh.

Hospital for Consumption and Diseases of the Chest.

Messrs. Lockett have contributed the sum of £100 towards the new building fund of this charity.

A Female Registrar of Births and Deaths.

The West Derby Guardians have recently appointed Mrs. Richard Edwards, wife of the retiring registrar, to the post of registrar of births and deaths for the Litherland district.

Presentation to Mr. Charles Langton by the Hospital Saturday Fund Committee.

An interesting gathering was held on the 14th inst. at the Liverpool Royal Infirmary to witness the presentation of an illuminated address subscribed for by the committee of the Hospital Saturday Fund to Mr. Charles Langton upon his retirement owing to ill-health from the post of chairman, an office which he had held for many years. Mr. Langton has devoted his life to hospital work. If not the oldest he is one of the oldest members of the committee of the Liverpool Royal Infirmary. He has been chairman of the Nurses' Home in Dover-street, and for many years has been a member of the committee of the Children's Infirmary. Mr Langton in a graceful speech thanked the committee of the Hospital Saturday Fund for the good feeling they had always evinced towards him whilst he was their chairman.

May 17th.

NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

The Title of Doctor of Medicine.

THOMAS PAINE HETHERINGTON was on May 13th prosecuted before the Mayor of Newcastle-upon-Tyne and other magistrates for illegally using the title of Doctor of Medicine. For many years this man has been making a considerable income by holding himself out as a specialist in the treatment of venereal disease. His defence was that he was registered as a dentist and a doctor of medicine of the United States of America; that his father and grandfather had both carried on the same trade in Newcastle without interruption; and that he did not charge for advice, only for medicine supplied, which he said he had a licence to sell. The magistrates fined Hetherington £20 with costs and a cheque was immediately handed in for the amount. This is an important case and probably only one of many likely ere long to come before the magistrates. It demonstrates that the existing law is able to put a stop to some forms of unqualified practice. Unfortunately it is not at present able to altogether prevent unqualified practice, but now that the General Medical Council has prohibited the employment of unqualified assistants by medical men there are good grounds for applying to Parliament to strengthen the law so as to make it possible to put a stop to the practice of medicine and surgery by unqualified men unconnected with qualified practitioners.

The Health of Newcastle-upon-Tyne during the Year 1897.

Dr. H. E. Armstrong, the medical officer of health, has just submitted his annual report for the year 1897. The death-rate has been less than that for the whole of the 33 large towns of the United Kingdom—viz., 18·7 per 1000. There have been fewer deaths from zymotic diseases than in 1896. Dr. Armstrong dwells upon the necessity of the dairies outside the city being regularly inspected, as several cases of enteric fever in the city had been traced to some of them. During the year house accommodation for 1173 families had been provided and 2173 marriages were registered, the highest number on record since 1874. The report is a most satisfactory one.

The Site for the New Infirmary, Newcastle-upon-Tyne.

On April 22nd a public meeting was called by the Mayor of Newcastle for the purpose of confirming the action of the Town Council, which is promoting a Bill before Parliament one item of which is for permission to hand over to the governors of the Royal Infirmary 10 acres of the Leazes upon which to build the new infirmary which Mr. J. Hall has undertaken to erect. The meeting was held in Olympia, which is the largest hall in the city, and was presided over by the Mayor. It was not largely attended and to the general surprise a considerable majority of those present voted against the Bill. A poll was demanded and towards the end of the present month the result will be known. It will be a most unfortunate thing if the property owners and the ratepayers declare against the Bill, and it is believed that there will be an overwhelming majority of votes recorded in favour of the promotion of the Bill. In the meantime meetings of workmen are being held and largely attended at the street corners of the town, where addresses are delivered by town councillors and others in favour of the Bill. Whether it is altogether a wise thing thus to appeal to one section of the community upon an important question affecting the interests of all the inhabitants of Newcastle is a question upon which there is room for more than one opinion. Certainly it tends to introduce a class element into the controversy which it is extremely desirable not to stir up. If by any chance Mr. John Hall's gift of £100,000 should be lost to the sick and lame poor that will be one of the greatest misfortunes possible. The infirmary position is a strong one—the whole of the acting staff have expressed their opinion that the Leazes would be an excellent site, and it is one of those mentioned by Mr. J. Hall in his letter to the committee upon which he would be willing to build. The stewards of the freemen and the corporation are willing to allow the infirmary to be built upon the Leazes. The opposition comes from a section of the freemen, from some property owners residing near the Leazes and from a number of Novocastrians who are unwilling under any circumstances for any part of the town moor to be built upon—for which view there is undoubtedly much to be said. It is announced that should the poll be in favour of building the infirmary on the Leazes the Bill will be opposed in Parliament. It is to be hoped, however, should the poll be in favour of the Bill, the opposition will cease. It would be far better for all concerned that the town should be allowed to manage its own affairs.

Gratuitous Medical Aid in Newcastle-upon-Tyne.

At the weekly meeting of the committee at the Royal Infirmary on May 13th a member stated that 83,000 persons

received relief from the various medical charities in the city during the year 1897—some 40 per cent. of the inhabitants of the town. From the reports of the charities it may appear that 83,000 persons received relief, but it is exceedingly doubtful as to whether this is so. It is more than probable that the same person is entered many times as a patient, and even if 83,000 persons did receive relief it is quite certain many of them were not resident in Newcastle. The idea is prevalent that too many persons are relieved by the medical charities, and the matter having been raised and relegated by the committee to the medical staff of the infirmary to inquire into and report upon, some reliable data are likely to be obtained.

May 18th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

The Medical Commissioner of the Local Government Board in Ireland.

SIR FRANCIS MACCABE, the Medical Commissioner of the Local Government Board, has recently retired under the "65" rule after a long and distinguished career in the public service. He filled the position of a medical inspector under the board for many years and was appointed a Royal Commissioner to inquire into the causes of the high death-rate in Dublin in 1879. He has been since then a member of several departmental commissions to investigate matters in connexion with prison dietaries and lunacy administration in Ireland. The ability with which he discharged his difficult duties has never been questioned. The appointment of his successor in office was publicly announced on May 12th, but it had been known for many months that the able and efficient medical inspector for the Dublin district had proved himself to be the only proper successor to Sir Frances Maccabe. The name of Mr. Thomas Stafford as chief medical inspector under the Local Government Board is well known. It is recognised with satisfaction that he as the new medical commissioner will deal with the responsibility as regards the management of the union hospitals and the dispensing medical officers in Ireland under the new board, of which he is now a member, in a large and commonsense fashion and with a keen regard to the requirements of modern science in connexion with sanitation.

Londonderry Lunatic Asylum.

The Privy Council have sanctioned an increase of £50 to the salary of the medical superintendent, Dr. Hetherington.

The Medical Staff of the Tirah Expedition in India.

Amongst the officers specially mentioned in Sir William Lockhart's despatches I find the name of a Belfast man, Surgeon-Major Samuel Ferguson Bigger, M.B. Lond. He left his residence, Ardrie, Belfast, in September, 1897, while enjoying a well-earned leave after the Chitral campaign, to take part in the Tirah expedition. Sir William Lockhart writes: "The officers of the Army Medical Staff and of the Indian medical services have fully maintained their high reputation by their attention to the sick and wounded both under fire and in hospital." Dr. Bigger has been gazetted a Surgeon-Lieutenant-Colonel.

The Belfast (Corporation) Hospitals Bill.

Information has reached Belfast that the opposition to this Bill, which comes before a Select Committee of the House of Commons this week, has been withdrawn.

The Proposed New Asylum for County Londonderry.

There can be no doubt that throughout the county of Londonderry there is a widespread opposition amongst the cesspayers to the erection of the new asylum at Londonderry and this on many grounds. It is argued that owing to the poor agricultural prospects it is unfair to increase taxation for the erection of new buildings when many of the unfilled workhouses in different parts of the counties might be utilised for the housing of harmless lunatics; and it is also felt that the new asylum will not be at all central in its position and that the county is not properly represented on the board of governors. The delay in reference to the contracts (as reported in THE LANCET of May 7th, p. 1287) has again drawn attention to the matter, and at the Limavady Board of Guardians on May 16th it was resolved, after a very important discussion, to pass the following motion: "That the building of the new asylum for this (Londonderry) county be postponed in view of the new Local Government Bill becoming law." It was complained by some of the speakers that the Derry people and the Derry boards had not treated the county ratepayers fairly over this matter. It seems that although the ground for the new asylum at Derry has been purchased no contract has as yet been taken for the building. It is thought the Government want pressure brought to bear on them and that they may leave the whole matter of the erection of the new asylum over until the passing of the Local Government Bill, when of course an entirely new aspect will be put on the matter.

The Weather in Ulster.

We are at present experiencing in Ulster exceptionally bad weather. The nights are cold, severe frosts prevailing, while the days are sunless with frequent showers of rain, often accompanied with hail. Not for years have we had such a cheerless May.

Can Poor-law Medical Officers call in Consultants? Important Decision.

A case in which consultants and Poor-law medical officers were very much interested and which was listed for trial before the County-court judge has just been brought to a termination. Some notes on the subject have already appeared in THE LANCET. About three years ago a sealed order was issued by the Local Government Board to the effect that a Poor-law medical officer is at liberty to call in assistance if required with the consent of the guardians if the delay would not be injurious, but if the case proved to be very urgent then the services of "the nearest duly qualified medical practitioner" should be requisitioned. At the instance of Poor-law medical officers the Irish Medical Association wrote to the Local Government Board pointing out that "the nearest duly qualified medical practitioner" may not be in a position to render the required assistance and asking the board to define exactly how the medical officer should act under the circumstances. The Local Government Board declined to give the desired information and in polite language suggested that the subject was not one about which the association need concern itself. Some months ago a man was admitted to the Mitchelstown Workhouse Hospital suffering from depressed fracture of the skull in connexion with which serious symptoms had set in. The master, at the request of Mr. Walsh, the medical officer, telegraphed for Dr. Corby of Cork. Dr. Corby saw the patient in consultation with Mr. Walsh and proposed operation, but the patient persistently declined to permit it. In due course Dr. Corby applied to the guardians for his fee, but they stated that they could not pay it as the terms of the sealed order of the Local Government Board had not been complied with. Dr. Corby wrote to the Local Government Board explaining the circumstances of the case, suggesting that the Board could not have intended that their sealed order should have been interpreted so literally, and asked them to instruct the guardians as to their duties. The Board simply forwarded the letter to the guardians, but on being still further pressed they hinted that if the guardians passed a cheque for the amount of the fee they (the Local Government Board) would probably raise no objection. However, the guardians feared being surcharged by the auditor and persisted in refusing to pay. Dr. Corby accordingly instituted legal proceedings and, knowing the case would have far-reaching effects for the profession, engaged counsel. A defence was entered by the guardians, but there was an unexpected development a few days prior to the commencement of the sessions. The guardians' solicitor wrote to say that acting on the instructions of the Local Government Board auditor he was prepared to consent to a decree for the debt and costs. This action of the Local Government Board is regarded as the prelude to the withdrawal of the objectionable sealed order, especially as the *personnel* of the Local Government Board has been almost completely changed during the past week.

May 17th.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

Immunity of Arabs against Typhoid Fever.

M. VINCENT (Val-de-Grâce) stated at a meeting of the Academy of Medicine held on May 10th that he has found that French soldiers are on an average a hundred times more

subject to typhoid fever than native soldiers, a singular observation, because this disease is in general serious when it attacks Arabs. The comparative exemption of the Arabs depends, in his opinion, neither on a previous attack nor on a slow acclimatisation consequent on residence in towns, but on a natural immunity comparable to the immunity of negroes against yellow fever or of Algerian sheep against anthrax. M. Vincent endeavoured to discover if the blood obtained from Arabs caused agglutination of typhoid bacilli. The blood of 23 natives was used for that purpose, but it presented no distinct serum reaction, the phenomena being exactly the same as those yielded by the blood of persons susceptible of the infection of typhoid fever. This constitutes a new proof that the agglutinating power of blood is not necessarily connected with immunity, whether natural or acquired, and that the serum reaction is a reaction of infection and perhaps of defence, but not a reaction of immunity.

Orthoform in Gynæcology.

At the same meeting of the Academy of Medicine M. Pozzi presented a communication by Dr. Blondel on Various Applications of Orthoform in Gynæcology, especially for the Production of Local Anæsthesia of the Uterus in the Treatment of Endometritis and even in Curetting. Orthoform, the scientific name of which is para-amidometoxy-benzoic acid, is a derivative of cocaine and possesses a similar anæsthetic power, which may, however, be prolonged for twenty-four hours and is, moreover, absolutely harmless. Dr. Blondel has employed for uterine dilatation laminaria tents which had been kept for eight days in ether saturated with orthoform and were found to produce in almost all cases only slight pain. A series of 50 patients were successfully treated for endometritis in an average period of three weeks by the employment of intra-uterine drainage with antiseptic gauze soaked with glycerine, a treatment which Dr. Blondel has made use of for six years with good results. Hitherto it has been rather painful, but after the addition of orthoform suspended in the glycerine the patients have felt no pain and have been enabled to go about during the time that they refrained from following their occupations. Curetting could be effectually performed without pain if the uterus was filled with orthoform gauze an hour before the operation.

Statistics of Diphtheria.

At a meeting of the Société Médicale des Hôpitaux held on April 15th M. Sevestre submitted statistics of diphtheria in the Children's Hospital during the year 1897. Among 580 patients the total mortality was 17·4 per cent. If the deaths which occurred during the first twenty-four hours after admission be deducted the mortality falls to 10·8 per cent. Various doses of serum were given, the average amount injected being 20 c.c. There were 341 cases of croup, among which intubation was performed on 202 children. At the same meeting M. Richardière submitted to the society the statistics of diphtheria at the Hôpital Trousseau for the first six and the last two months of the year 1897. It included 696 patients, of whom 125 died, giving a mortality of 17·9 per cent. On deducting 31 cases in which death occurred in less than twenty-four hours after admission the mortality is reduced to 13·5 per cent. Among these patients 344 cases of diphtheria which were not operated on gave a mortality of 4·1 per cent. Intubation was performed on 172 children, of whom 47 died, giving a mortality of 27·2 per cent. The cause of death after operation was almost invariably broncho-pneumonia. Among 11 cases in which primary tracheotomy was resorted to there were 5 deaths, or a mortality of 45·4 per cent. Secondary tracheotomy, after intubation, was performed 55 times; only 11 of these children survived.

The New Director-General of the Assistance Publique.

Dr. Napias, member of the Academy of Medicine, Inspector-General to the Ministry of the Interior, founder and general secretary of the Society of Public Medicine, has just been appointed Director-General of the Assistance Publique at Paris, in succession to Dr. Peyron, who resigned with the intention of devoting himself to politics and offered his services to the electorate of Seine et Oise but has not been successful. Dr. Napias is an eminent authority on all questions of poor relief and hygiene. His sterling qualities, both as a thinker and a man, are recognised on all sides and it will be generally admitted that no better selection could have been made.

A Notorious Murderer.

The notorious Vacher, who was arrested last year after having committed 20 murders according to his own confession and probably more than as many again, has been examined by three medical men familiar with mental disorders, Dr. Lacassagne, Dr. Rebatel, and Dr. Piéret. They divided the scope of the examination into distinct sections. Dr. Piéret took up the part of Vacher's life previously to his manifold crimes, from childhood until joining his regiment. He pointed out the prisoner's hereditary defects, his life in monasteries, his endeavour to murder his sweetheart followed by attempted suicide, and lastly his confinement for a year in a lunatic asylum. Dr. Lacassagne examined the period during which the various crimes were committed, a task which involved the study of more than 200 police records. According to him the prisoner's responsibility is unquestionable, full and complete, and the precautions which he took after each of his crimes to put the police off his track show the professional criminal. Finally, Dr. Rebatel has made a study of the man since his imprisonment, during which he feigned insanity and said that he was a messenger from heaven. The general conclusion of the three experts combined, arrived at after a long and conflicting discussion, was that the prisoner's hereditary defects and his antecedents were such as to warrant the opinion that his responsibility for his actions was in some degree impaired.

Medical Victims to Duty.

Dr. Davaine has just died at the age of twenty-nine years, a victim to duty. Some days ago he was sent for to attend a young child from whom he contracted diphtheria which has proved fatal. M. Gaume, a hospital *externe* at Lyons, has died after a short illness from acute septicæmia, the result of making a post-mortem examination of a case of gangrene.

May 17th.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

The Seidel Trial.

A SENSATIONAL trial, in which members of the medical profession were especially prominent, took place recently before a law-court at Brunswick. The events which led up to these proceedings happened a considerable time ago. The chief surgeon of the Brunswick General Hospital, Professor Seidel, formerly an assistant to the celebrated Professor von Volkmann, was said by some medical men of the town to have infringed the laws of professional etiquette by attending patients of other practitioners. Professor Seidel having heard of this talk, and being unable to obtain a retractation of the charge, unfortunately committed an act of violence by assaulting the author of these rumours with a whip. On account of this it was proposed that he should be excluded from the medical associations of Brunswick, but before the question came to the vote he committed suicide. It was understood from letters left by him addressed to his family and his friends that the occurrence above mentioned was not the only cause of his death, but that there were other intrigues which had rendered his position insupportable. It had been reported to the Government of Brunswick, which has the control of the hospital, that Professor Seidel had neglected his duties by not visiting the hospital wards regularly, that he had caused the death of a patient by performing a laparotomy when he was suffering from a furuncle on one of his fingers, and that he was not sufficiently careful with respect to antisepsis. These rumours, which originated chiefly with Professor Seidel's assistants, induced the Government to interrogate them officially and to open an inquiry. It was also intimated to Professor Seidel that he was suspended from his functions until the completion of the inquiry, but his death occurred before this intention was carried out. In his last letters Professor Seidel declared that he was driven to commit suicide principally by the behaviour of his assistants, whom he had believed to be his friends, and he implored his family to do everything to vindicate his honour. His brother accordingly applied to the leading surgeons of Germany to ask their opinion on the alleged misdemeanours of the deceased. There was a nearly general opinion that the Government of Brunswick had erred in suspending Professor Seidel before he had had an opportunity of defending himself and that the assistants had behaved improperly in intriguing against their chief. Professor von Bergmann of Berlin wrote a letter in which this opinion was expressed in an especially severe

way and it was published by the brothers in the leading papers of Brunswick, where the whole affair had naturally caused an immense sensation. The Government and the assistants thereupon prosecuted the brothers for libel. The trial lasted for five days and the professors of surgery of the two neighbouring universities—Professor Braun of Göttingen and Professor von Bramann of Halle—attended throughout the whole proceedings as medical experts. A great number of witnesses, old patients, hospital nurses, former assistants, &c., were summoned and gave evidence to the effect that the patients liked Professor Seidel and had never felt themselves neglected by him. As to the non-observance of antiseptic precautions it was stated in evidence that the death of a patient which had been attributed to Professor Seidel's carelessness was caused by perforative peritonitis following appendicitis. Other charges made against Professor Seidel were, in the opinion of the experts, not sustained. The greatest sensation was caused when Professor von Bergmann, although seriously ill, appeared before the court demanding to give evidence. The Public Prosecutor was desirous that he should not be heard, for, being the author of the offending letter, he must eventually be regarded as an accomplice of the defendants; but the court, nevertheless, allowed him to speak. In his evidence Professor von Bergmann declared that if a hospital officer could be suspended on charges like those which were imputed to the late Professor Seidel no surgeon could in future be sure of not becoming the defendant in a prosecution and that nobody would undertake to perform operations. The rules of antisepsis were not so precise as was believed by the assistants. He dealt very severely with the behaviour of the latter, saying that he could not criticise them adequately without committing a new offence. He was glad to say that it was the only instance, so far as he knew, of assistants endeavouring to undermine the position of their chief, to whom they ought rather to feel indebted. The other experts coincided in this opinion. The brothers of Professor Seidel were found "not guilty," a verdict which was received by the audience with great applause. The court in delivering judgment on the sixth day of the trial said that the accusations against the late Professor Seidel had been proved to be unfounded and that the defendants had not acted libellously in contradicting them. The whole press published detailed reports of the proceedings and the action of the Government and the assistants was generally condemned.

EGYPT.

(FROM OUR OWN CORRESPONDENT.)

Quarantine Regulations at El Tor.

THE old regulations for the landing and examination of pilgrims will be enforced this year with more than usual care. It is intended to examine every man for plague by inspecting his tongue, skin, armpits, and groins, and the travellers will be landed in groups of forty or less. A medical officer will be furnished for every lot of 500 pilgrims and he will be responsible among other things for the disinfection of latrines with lime, for the general hygiene of the camp, and for the cleanliness of the food and water. Three hospitals are provided—one for general diseases; one for diarrhœa, which is an annual accompaniment of the pilgrims; and the third for epidemic or infectious disease. The dead will be submitted to necropsy and bacteriological examination. Those arriving earliest are expected to reach Tor about the middle of May and Dr. Armand Ruffer hopes to be there then himself. Ten disinfecting stoves for treating clothes and bedding are already on the spot and they supply a greater quantity of sterilising power than was ever before present.

Presentation to Mr. Milton.

Last week an evening entertainment was given to Mr. Milton by the native doctors, druggists, and nurses of Kasr-el-Aini Hospital, of which he has been the energetic and creative director for the past fourteen years. Speeches were delivered by five of the hosts in classical Arabic, describing some of the reforms instituted by their guest and master. Mr. Milton, in a feeling reply, spoke in English and in French, adding a few words in German and in Arabic. The articles presented to Mr. Milton on the occasion included a very large gold watch from the hospital officials, a silver service from old students of the hospital, and a china coffee service from the native nurses. The whole idea originated with the Egyptians themselves, the occasion being quite unique in the history of this country and proving a very gratifying token that good English work can be fully appreciated by the natives.

British Wounded in the Soudan.

The first convoy of wounded from the Soudan, consisting of 6 officers and 15 men, left Abadia, near Ginanetti, on May 1st; the second, with 6 officers and 29 men, left on May 2nd; the third, with 40 men, left on May 4th; and the fourth and last, with 30 men, will leave on May 7th. In three days after starting they expect to be at Assouan and they ought all to be in Cairo before May 18th. The British troops will remain in tents and huts at Damali and El Silliem, about 11 miles south of Berber, until a further forward movement be taken, which is not expected until September. The hygiene of the camp is excellent, the general health is good, but the prevailing disease for the moment is dysentery. The Roentgen ray apparatus has now reached Cairo from England and will be ready for the next fight. A sergeant-major of the medical staff is in charge of it and a medical officer who is also an expert with the rays is to arrive here shortly.

Cairo, May 4th.

Obituary.

ALFRED JOHN WALL, M.D. LOND., F.R.C.S. ENG., INDIAN MEDICAL SERVICE (RETIRED LIST).

ALFRED JOHN WALL was born in 1847, his father being a medical practitioner with a large practice in the West-end of London. He was educated at Epsom College, where he distinguished himself and received from Dr. Thornton, then head master, a very high unsolicited testimonial to his conduct and abilities when he left the College. In 1865 he entered at St. Mary's Hospital, where he was known as a hard worker, and took various prizes. In 1868 he obtained the scholarship for Anatomy there, which carried with it the title and duties of Assistant Demonstrator of Anatomy for the winter session. In 1870 he was appointed resident medical officer to St. Mary's Hospital, and in 1871 he became resident obstetric officer. In 1872 he became a Fellow of the Royal College of Surgeons of England and in 1873 he went up for the Indian Medical Service competitive examination when he took a high place. In the autumn of the same year he took the degree of M.D. at the University of London. In January, 1874, he went out to India and was almost immediately appointed resident medical officer at Bhangulpore. The following year, when the Snake Poison Commission was instituted, as there was at that time only one other man with his qualifications in the service, although he was so newly entered, he was offered a seat on it. This he accepted and the greater part of the practical work of the Commission fell upon him as the youngest member. He held the post for three years and then as his health was failing he sent in his resignation. He was twice asked to reconsider the matter, but upon adhering to this determination he received a letter of thanks from Government for the valuable work he had done and was offered his choice between the appointment as residency medical officer in Nepaul and deputy professor of anatomy in Calcutta. Considerations of health made him choose the former. Some time afterwards when travelling on furlough he contracted malarial fever, which became complicated with pneumonia and in consequence he came home invalided and never recovered sufficiently to return to India. In 1883 he published a book entitled, "Indian Snake Poisons." He next took up the subject of cholera and followed successive outbreaks of that disease over Europe. In Italy and Sicily he was especially distinguished for his services and the municipal council of one town presented him with an address and the freedom of the place in recognition. The poorer people, too, who shunned their own doctors, thinking that the epidemic had been wilfully produced by them, would rush out of their houses as Dr. Wall passed by and beseech him to go in and help them. In 1893, as a result of these travels and investigations,

he published a book on "Asiatic Cholera," which was favourably reviewed and received.

He had always been an indefatigable student of pathology and he now turned his attention still more closely to it, working at it for many months together in Buda-Pest, Berlin, and Paris. In the former place he did practical work in the laboratory of his friend Dr. Nékám; in the latter he also took the course in bacteriology in the Pasteur Institute. In December, 1897, he left England with the intention of going to the Riviera, there to put into form his pathological notes. But whilst staying in Paris *en route* he became so ill that he was advised to return to England in February, instead of continuing his journey, and went to Hastings. At length his condition became so much more serious that on April 21st he was brought up to London, but he gradually got worse and died on May 2nd, 1898.

A St. Mary's Hospital man and intimate friend of Dr. Wall from student days says of him: "In manner he was diffident, quiet, and retiring. He was extremely well informed in every subject of art, science, and literature—the best possible of companions. He talked German, French, and Italian fluently and was keenly interested in the politics, as well as the literature, of the countries in which he made his temporary home."

ANGUS MACKINTOSH, M.D., L.F.P.S. GLASG.

AFTER an illness of very brief duration Dr. Angus Mackintosh, medical officer of health of the Chesterfield Rural Sanitary District, died at his residence, Gladstone-road, Chesterfield, on May 7th, at the age of sixty-four years. Dr. Mackintosh was a native of Fincastle, Perthshire, and owed his fine physique and imposing personality as well as his love of rural sports to the healthiness of the climate in the charming vale of Athole. He received his medical education at the University of Glasgow, where he carried off from year to year many prizes earning as well the approbation of his teachers and the goodwill of his fellow students. He spent eight years of his professional life in the work of general practice at Callington, Cornwall, but the bent of his mind lay in the direction of his favourite science, preventive medicine, to the literature of which he was a voluminous contributor. He was appointed twenty-five years ago the first medical officer of health of the Chesterfield Combined Sanitary District and continued to discharge the duties of that important post until the day of his death. His successive annual reports, which were often favourably commented on in the columns of THE LANCET show a vast amount of useful sanitary work carried out during his tenure of office towards the sanitary amelioration of this populous district. They were admirable examples of keen observation, close argument, and beautiful diction and will be long remembered by those who read them since they were the outcome of painstaking investigation and original thought. He put his whole soul, mind, and strength into his work and always took his stand rather on the firm ground of fact than on the less certain basis of theory. He loved to examine the foundations on which opinions rest and held fast to the view that correctness of judgment and accuracy of thought are infinitely more valuable than all the speculative knowledge which we can obtain.

Possessed of a dignified presence, an authoritative bearing, and in a pre-eminent degree of the judicial temper, the sanitary authority have lost in Dr. Mackintosh an able officer in whom they reposed every confidence. By many of his colleagues in the public health service, by the members of the medical profession within his district, and by the public whose health he safeguarded for a quarter of a century he will be deeply regretted. The funeral took place on May 10th in the presence of a large assembly of friends, medical men from all parts of the county, and officials of the various public bodies with which Dr. Mackintosh was connected.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.—The deaths of the following eminent foreign medical men are announced:—Dr. Ludwig Schillbach, Extraordinary Professor of Surgery in the University of Jena, at the age of seventy-three years.—Dr. Humbert Molière, Physician to the Lyons Hospitals.—Dr. Philogonio Lopes Utinguassu, Assistant Professor of Physiology and Pathological Anatomy in the Medical School of Rio de Janeiro.—Dr. Amedeo Marianelli, Extraordinary Professor of Dermatology and Syphilography in the Medical School of Modena.—Dr. A. Krasovski, formerly Professor of Midwifery and Gynæcology in the Military School of St. Petersburg and Corresponding Member of the Paris Academy of Medicine.

CONGRESS OF INTERNAL MEDICINE AT WIESBADEN.

(FROM OUR BERLIN CORRESPONDENT.)

THE Congress of Internal Medicine was opened at Wiesbaden on April 13th and concluded its work on April 16th. The President was Dr. Schmidt of Frankfort, who in his inaugural address said that the question of medical education which had been chosen as the first subject of discussion was one of great interest because the constant sub-division of medicine and surgery into a number of special branches had made it almost impossible to take a general survey of the whole field of medical knowledge. Nowadays a medical man must be satisfied with keeping himself *au courant* in his speciality and there is no ground for expecting that in the forthcoming century a great genius will arise capable of recombining the disjoined parts of medical science. But even though such an exceptional individual should not be forthcoming, is there any reason for despairing of the future of medicine? This question would not be answered in the affirmative by anyone who had attentively considered the present position of medicine as an art and a science, especially the manner in which laboratory investigations had contributed to the development of methods of treatment. The inquiries necessary for original research had aroused a certain amount of opposition, and as the antivivisectionists are supported in their agitation by women who are fond of dogs and cats so in like manner the medical men ought to look for allies among the mothers whose children owe their recovery from diphtheria to the use of antitoxic serum and among the thousands of patients who have experienced in their own persons the benefits of antiseptics. All these and other improvements were only made possible by experiments on animals. The work of the Congress then commenced with a discussion on

Medical Education.

Professor VON ZIEMSSEN (Munich), who spoke first on this subject, made the following recommendations: The practical and technical education of young medical men should be improved; the duration of the curriculum should be increased; in addition to the lectures on general and special pathology and therapeutics there should be practical courses on the methods of diagnosis (microscopical, chemical, bacteriological, laryngological), on the methods of general therapeutics (dietetic, hydropathic, electric, balneological, &c.), and on the technique of treatment in the hospital wards; the faculties should provide the necessary stock of microscopes, models, and other appliances requisite for clinical study; and the out-patient departments should be made more use of for the purpose of instruction. A "practical year" in a hospital, as proposed in connexion with the contemplated reform of medical examinations and described in THE LANCET of Jan. 4th, 1896, page 74, is very desirable, but this should only be undertaken after the qualifying examinations have been passed.

Dr. VON JAKSCH (Prague) was of opinion that reform in medical education is quite compatible with the existing system of university teaching and that it is not necessary to detach the medical faculties and to institute special medical schools, as has been proposed by some radical reformers. Students ought to be required to attend the medical clinic ten hours every week for two years. Instruction of medical students in hygiene, mental diseases, dermatology, diseases of children, otology and laryngology, dietetic and mechanical treatment and hydro-therapeutics is quite indispensable. An augmentation of the *personnel* and the *matériel* of the clinics will be necessary in order that they may be able to meet the increased demands on them. Specialists ought to have to pass special examinations.

In the course of the discussion Professor JÜRGENSEN of Tübingen pointed out that the importance of internal medicine was not fully recognised by young medical men who were dazzled by the great successes of surgery, but in actual practice nine-tenths of the cases they had to treat were medical.

The utility of the practical year was denied by Professor QUINCKE of Kiel and Professor HOFMANN of Leipsic who were of opinion that it might be replaced by more extended instruction in the out-patients' departments.

The Therapeutic Use of Hot Dry Air.

Dr. MENDELSSOHN (Berlin) said that the treatment of chronic arthritis was almost exclusively a question of temperature and that the most efficacious method was the application of hot dry air, which allows a high temperature to be maintained for as long a time as may be required and does not produce any undesirable symptoms. Dr. Mendelssohn following the example of English physicians has made use of hot dry air and has proved that temperatures of from 120° to 140° C. (from 248° to 284° F.) could be borne by patients for several hours. The subjective sensations were not disagreeable and no unfavourable consequences were produced on either the pulse or the temperature. The immediate local effect on the joints was at once very obvious, especially in chronic rheumatism, gout, and other affections of the joints; sometimes after the first application of the hot air they became temporarily more moveable, but, of course, to obtain a substantial improvement the treatment must be applied for a longer time.

Treatment of Chlorosis by Hot Baths.

Dr. ROSIN (Berlin) said that articles published by Professor Baeltz of Tokio, Japan, had induced him to treat a number of chlorotic patients by baths at 40° C. (104° F.). According to Professor Baeltz the Japanese habitually bathe, not in cold water, but in water at 45° C. (113° F.). They are said to feel quite comfortable after these very hot baths and not to be liable to catch cold. These statements have been tested by experiments made in the medical clinic of Halle, and Dr. Rosin has found that the muscular pain of which chlorotic patients so often make complaint is very soon relieved by this mode of treatment. The baths are given three times a week just before bedtime. On the first occasion the patients remain in the baths for a quarter of an hour and afterwards for half an hour, during which time they perspire abundantly, and are subsequently douched and rubbed. More than three baths a week are unnecessary and the whole course of treatment lasts four weeks. After the baths a sensation of general comfort is experienced, the appearance and the appetite improve, and the muscular pains disappear. These hot baths produce an effect similar to that of the expensive carbonic acid and chalybeate mud baths and are, of course, more within the reach of people of moderate means. Dr. Rosin expressed the opinion that some forms of constitutional disease may be more advantageously treated by inducing perspiration than by internal medication.

Treatment of Diabetes.

Professor LEO (Bonn) introduced the subject with an account of experiments made on dogs for the purpose of investigating the origin of diabetes. He concluded from them that the presence of sugar in persons who are addicted to beer drinking was caused by a toxic product of the yeast cells. Persons in whose family diabetes is hereditary ought, therefore, to avoid the use of beer and those who are already diabetic ought, of course, to do likewise. In order to reduce the formation of sugar in the organism carbohydrates ought to be taken by the patients as sparingly as possible; in fact, they ought at the beginning of the treatment to be absolutely excluded from the dietary, but not for longer than from three to five weeks, during which time the food should principally consist of albumin, fat, and vegetables with nothing but tea or coffee to drink. After this time amylaceous food may be taken in very limited quantities. In somewhat severe cases a period of abstinence is necessary three times a year. Massage is useful for increasing metabolism and strengthening the muscles. Opium may be mentioned as an internal remedy which is efficacious in some instances. A new yeast product, termed zymase, had an obviously good effect in one case, but the observations were not yet finished. The mineral waters of Karlsbad, Neuenahr, &c., were sometimes very valuable, although they had no specific action against the disease.

Dr. GRUBE (Neuenahr) discussed the conditions which presented themselves when diabetes was complicated with albuminuria. Among 473 cases of diabetes examined albumin was found to be present in 191. There are five forms of diabetic albuminuria: (1) the albuminuria of the final stage of far advanced diabetes; (2) that produced by cardiac failure; (3) that due to senile alterations of the blood-vessels, which usually appears earlier in diabetics than in other persons; (4) functional albuminuria which may be caused by irritation of the kidneys by the sugar excretion; and (5) the albuminuria of chronic nephritis.

Chronic Diseases of the Heart.

Dr. SCHOTT (Nauheim), speaking on this subject, said that myocarditis is much more frequent than is generally believed; it is caused by arterio-sclerosis, syphilis, or febrile diseases. Fatty degeneration of the cardiac muscle is still more frequent, the muscular substance being affected by over-exertion of the mental or bodily powers and by abuse of tobacco and alcohol. The principal causes of cardiac trouble are advanced life, the climacteric period in women, and excesses of various kinds, especially masturbation during adolescence. Treatment must first aim at increasing the efficiency of the heart muscle. Digitalis still continues to be regarded as the standard remedy for internal administration. Oertel's "terrain cure" and Zander's gymnastic method also give good results. His (Dr. Schott's) own mechanical method has the advantage of being easily practised and of allowing exact graduation. Its contra-indications are aneurysm of the heart and the great vessels and advanced arterio-sclerosis especially where apoplexy is imminent. Dr. Schott showed a great number of skiagraphs by which it was proved that mechanical treatment caused stronger contraction of the heart and consequently a diminution in the size. On the other hand, in a case of advanced arterio-sclerosis and aneurysm of the aorta the heart was proved to have become still more dilated.

Arthritis Deformans.

Dr. BADT (Salzschlirf) drew attention to the frequency of this disease in women especially at the climacteric period. Of 53 cases observed by him 6 per cent. were men and 94 per cent. were women; in 80 per cent. of the latter the illness began at the age of from forty to fifty years. Dr. Badt was therefore of opinion that the administration of oophorin, which has proved useful in climacteric troubles, might be a valuable adjunct to other therapeutic measures such as baths, massage, &c.

The Urine in Pneumonia.

Dr. FRIEDEL PICK (Prague) stated that he had observed that the urine, which is strongly acid during the feverish stage of pneumonia, at once becomes neutral or alkaline after the crisis. This symptom, which lasts for about twenty-four hours and sometimes even for thirty-six hours, may be caused by the absorption of the sodium compounds contained in the pneumonic exudation. The normal reaction usually reappears after an interval of twenty-four hours.

Intestinal Auto-intoxication.

Dr. MÜLLER (Marburg) said that the term auto-intoxication denoted certain symptoms due to toxic products of metabolism in the individual affected. According to Bouchard's views uræmia, eclampsia, diabetic urine, gout, and the symptoms caused by diseases of the thyroid and the suprarenal glands are auto-intoxications, but intestinal auto-intoxications do not belong to this category as they are produced by saprophytes in the gastro-intestinal canal. Some alleged auto-intoxications must be regarded as cases of poisoning due to unwholesome food. The definite putrefaction products elaborated in the intestines—such as indol, phenol, and skatol—are only very slightly toxic, but there is no doubt that the contents of the intestines may pass into a state of toxic decomposition as is proved by the serious symptoms which may occur in some gastric and intestinal diseases, especially in children. The most favourable condition for such auto-infection is the obstruction to the progress of the fæces which is present in peritonitis and ileus. Dr. Müller said that in classifying an illness as an auto-intoxication it is necessary to be able to define the special toxin in each individual case, but this is as yet far from being accomplished, for the doctrine of auto-intoxication is founded on only a very few exact facts. With respect to treatment, it has been stated that destruction of the bacteria in the intestines is not possible. The effect of calomel does not depend on its antiseptic but on its purgative action.

Professor BRIEGER (Berlin) remarked that the theory of auto-intoxications is founded on the presence of toxins in the urine and the perspiration, but hitherto it has only been possible to isolate those toxins in a few instances. Brieger and Wassermann have succeeded in obtaining a toxalbumin from the urine of patients with erysipelas, whilst Roce

found a similar toxalbumin together with putrescin and cadaverin in the urine of patients with gastro-enteritis. Toxalbumin is present also in the urine of dyspeptic infants. The toxic products of the perspiration are very uncertain. With regard to treatment Professor Brieger recommended diaphoretic and purgative medicines together with washing out the stomach and rectum.

Iodothyrin.

Professor ROOS (Freiburg) stated that the iodothyrin obtained from the thyroid glands of sheep is an albuminous substance containing about 4 per cent. of iodine. Thyroid glands in a state of advanced colloid degeneration, although they contained much iodine, nevertheless yielded only very little iodothyrin. From this Professor Roos inferred that in these diseased glands only a relatively small portion of the iodine was contained in the substance corresponding to iodothyrin and he suggests that in goitre there is an abnormal distribution of iodine in the thyroid gland.

Intradural Injections.

Dr. JACOB (Berlin) said that puncture of the spinal canal, introduced by Professor Quincke in 1891, had been valuable for diagnostic purposes but that its therapeutic utility was less apparent. In particular the diminution of the cerebral pressure brought about by puncture had not been attended by any obvious benefit. Dr. Jacob has made experiments in animals for the purpose of investigating the effects of increase of pressure. He injected into the subarachnoid space of dogs about 70 c.c. of a 0·1 per cent. solution of common salt coloured with methylene blue and this fluid was found at the necropsy to have passed through the whole cerebro-spinal canal and made its way into the brain. But notwithstanding the immense increase of pressure in the cerebro-spinal fluid owing to the injections no symptoms of cerebral pressure showed themselves. Puncture of the cerebro-spinal canal is therefore useless as a means of treatment, for the symptoms of cerebral pressure are not dependent on the increase of fluid in the canal. In a second series of experiments Dr. Jacob made injections into the subarachnoid space for therapeutic purposes. In cases of meningitis the subarachnoid space was washed out with 0·1 per cent. solution of common salt or with carbolic acid solutions varying in strength from 0·5 to 1 per cent. An injection of 25 c.c. of a 4 per cent. solution of potassium iodide in dogs caused dangerous symptoms of poisoning, which, however, soon disappeared. This substance must therefore be employed in weak solutions.

Papers were also read by Dr. Engel (Berlin) on the Blood Cells in Pernicious Anæmia, by Dr. Bornstein on Saccharin, by Dr. Magnus-Levy on the Alkalinity of the Blood in Gout, by Dr. Edinger (Frankfort) on a Disease Resembling Tabes, by Professor Petruschky (Dantzig) on Streptotrichosis, by Professor Wyss (Zürich) on Acute Hæmorrhagic Myelitis, and by Dr. Pässler (Leipsic) on the Treatment of Disorders of the Circulation in Infectious Diseases. The next Congress will meet at Carlsbad.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed the First Professional Examination for the diploma of Fellow at a meeting of the Board of Examiners:—

Monday, May 16th:

Charles Henry Bullen, Mason University College, Birmingham; William Gough, B.Sc. Lond., Yorkshire College, Leeds; John Ikin Sangster, M.B., Ch.B. Adel., M.R.C.S. Eng., L.R.C.P. Lond., Adelaide University, Yorkshire College, Leeds, and London Hospital; Evelyn Davison Telford, Cambridge University; Albert Ernest Finney and William Paynter Noall, Owens College, Manchester; William Stewart Dickie, St. Mungo's College, Glasgow; and William John Young, University College, Liverpool.

Eight gentlemen were referred for six months.

Tuesday, May 17th:

Nathaniel Bishop Harman, M.R.C.S. Eng., L.R.C.P. Lond., B.A., M.B., B.C. Cantab., Cambridge University and Middlesex Hospital; John Thomas Hewetson, M.R.C.S. Eng., L.R.C.P. Lond., M.B., C.M. Edin., Edinburgh University and King's College Hospital; Arthur Gentry Pitts, Charing-cross Hospital; Norman Frederic Ticehurst, B.A. Cantab., Cambridge University and Guy's Hospital; and Arthur Solomon Morley, St. George's Hospital.

Eleven gentlemen were referred for six months.

The following are the arrangements for the forthcoming final examination for the Fellowship, for which 40 gentlemen have entered their names.

Monday, May 23rd, Written Examination, 1.30 P.M. to 5.30 P.M., at Examination Hall; Tuesday, May 24th, Clincal Examination (written and *viva voce*), 2.30 P.M. to 5.30 P.M., at Examination Hall; Wednesday, May 25th, Operations, 1.30 P.M. to about 6 P.M., at Examination Hall; Thursday, May 26th, Surgical Anatomy, 2 P.M. to 4 P.M., at Examination Hall; Friday, May 27th, Pathology, 5 P.M. to 7.40 P.M., at Royal College of Surgeons; Saturday, May 28th, Pathology, 3 P.M. to 5.40 P.M., at Royal College of Surgeons. Candidates will be required to attend on May 23rd, 24th, 25th, and 26th, and on the 27th or 28th.

UNIVERSITY OF CAMBRIDGE.—At a congregation on May 12th the following medical and surgical degrees were conferred:—

Doctor of Medicine.—Tice Fisher Budden, Caius; Hugh Edward Wingfield, Caius; George Porter Mathew, Trinity Hall; and Harry Hollis, Sidney Sussex.

Bachelor of Medicine and of Surgery.—Francis Raynes Martin, Caius; and Charles Albert Trouncer, Jesus.

Bachelor of Surgery.—Henry Ernest May, Clare.

At the third examination for medical and surgical degrees, Easter Term, the following candidates passed in the subjects indicated:—

Part I. Surgery and Midwifery.—Barnes, B.A., Christ's; Boulton, B.A., Clare; Byles, King's; W. D. Chapman, B.A., Corpus Christi; H. N. Clarke, B.A., Trinity; Denyer, M.A., Queen's; Dore, B.A., and W. Eardley, M.A., St. John's; Fryer, B.A., Christ's; Garrood, B.A., St. John's; Glasier, B.A., Emmanuel; Glynn, B.A., Clare; W. D. Harmer, B.A., King's; Hart-Smith, B.A., and Hay, B.A., Gonville and Caius; Jordan, B.A., Sidney Sussex; Kemp, B.A., Clare; Letchworth, B.A., Emmanuel; A. F. McCallan, B.A., Christ's; H. F. Parker, B.A., Emmanuel; Pettinger, B.A., H. Selwyn; S. P. Pollard, B.A., Gonville and Caius; Powell, B.A., Emmanuel; S. B. Reid, M.A., St. John's; R. E. Sedgwick, B.A., Gonville and Caius; Sewell, B.A., Pembroke; C. C. Simson, M.A., and G. R. Slade, B.A., Trinity; Stacey, B.A., and F. W. Sumner, B.A., St. John's; Sutcliffe, B.A., Emmanuel; Talbot, B.A., King's; Tallent, B.A., and E. C. Taylor, B.A., St. John's; Thorp, B.A., Emmanuel; I. Ll. Tuckett, M.A., Trinity; Ware, B.A., Pembroke; W. K. Wills, B.A., St. John's; R. J. Wilson, B.A., Emmanuel; and A. G. Wilson, B.A., Gonville and Caius.

Part II.—Betteridge, B.A., Gonville and Caius; T. H. Brown, B.A., Pembroke; Byles, King's; Carter, B.A., Jesus; Corner, B.A., Sidney Sussex; H. G. Deller, B.A., Trinity; A. B. Green, M.A., Downing; Gregory, B.A., St. John's; Harrison, B.A., Magdalene; Heilborn, B.A., Gonville and Caius; Levick, B.A., Jesus; E. A. C. Matthews, B.A., Trinity; H. E. May, M.A., and F. A. Mills, B.A., Clare; Naish, B.A., Trinity; Prest, B.A., St. John's; Ransome, B.A., Gonville and Caius; Roderick, B.A., Emmanuel; J. E. Sandilands, B.A., Trinity; Sargent, B.A., St. John's; Hon. G. H. Scott, B.A., Trinity; and C. White, B.A., Christ's.

ROYAL COLLEGE OF SURGEONS IN IRELAND: DENTAL EXAMINATION.—The following candidates having passed the necessary examination have been admitted Licentiates in Dental Surgery of the College:—

J. J. Hayden, Dublin; F. H. G. Pakenham, Dublin; T. J. Ree, Belfast; and A. G. Taylor, Glasgow.

The following candidates passed the primary part of the examination:—

Miss H. A. Hall, Manchester; and J. I. Potter, Kilkenny.

ROYAL COLLEGE OF PHYSICIANS OF IRELAND.—The following candidates having passed the examination for the Licence in Midwifery of the Royal College of Physicians of Ireland were admitted as Licentiates on Friday, May 13th:—

G. H. Brand, L.S.A., and A. W. Shea, L.S.A.

FOREIGN UNIVERSITY INTELLIGENCE. — *Basle:* Dr. E. Kaufmann of Breslau has been appointed to the chair of Pathological Anatomy, vacated by the resignation of Professor M. Roth.—*Constantinople:* Dr. Düring, Professor of Dermatology, has been appointed Sub-director of the Haidar Pasha Hospital and has been granted the rank of Pasha.—*Cracow:* Dr. Ladislas Reiss has been promoted to an extraordinary Professorship of Syphiligraphy. Dr. Rudolf Trzebicky has been appointed Extraordinary Professor of Surgery.—*Jurieff:* Dr. N. de Savelieff of Moscow has been appointed Extraordinary Professor of Propædeutics and Medical Pathology.—*Padua:* Dr. V. T. Tettenero has been recognised as *privat-docent* of Midwifery and Gynæcology. Dr. Bertelli of Pisa has been recognised as *privat-docent* of Anatomy.—*Philadelphia (Jefferson Medical College):* Dr. Edward P. Davis has been appointed Professor of Midwifery and Dr. E. E. Montgomery Professor of Gynæcology.—*Prague (German University):* Dr. Alfred Fischel has been recognised as *privat-docent* of Anatomy and Embryology. *(Bohemian University):* Dr. Em. Formanek has been recognised as *privat-docent* in Medical Chemistry.—

Rome: Dr. Agenore Zeri has been recognised as *privat-docent* of Medical Pathology.—*St. Petersburg* (*Military Medical Academy*): Dr. Demetrius Kosorotoff of the Legal Faculty of the University of St. Petersburg has been appointed Extraordinary Professor of Forensic Medicine and Toxicology. Dr. Kedrovski has been recognised as *privat-docent* of Medical Bacteriology.—*Turin:* Dr. Lorenzo Scofone has been recognised as *privat-docent* of Materia Medica and Experimental Pharmacology.—*Vienna:* Dr. Neuburger has been recognised as *privat-docent* of the History of Medicine.

WHITSUNTIDE ON THE CONTINENT. — Cheap tickets available for eight days will be issued to Brussels during the week ending May 28th *viâ* Harwich and Antwerp by the Great Eastern Railway Company. Passengers leaving London in the evening reach Brussels next morning after a comfortable night's rest on board the steamer. For visiting The Hague, Amsterdam and other parts of Holland, the Rhine, North and South Germany, and Basle for Switzerland special facilities are offered *viâ* the Great Eastern Railway Company's Royal Mail Harwich-Hook of Holland route, through carriages being run to Amsterdam and Berlin; through carriages with restaurant cars are also run to Cologne and Basle. The General Steam Navigation Company's fast passenger steamers will leave Harwich on May 25th and 28th for Hamburg, returning May 29th and June 1st.

DIPHTHERIA IN LONDON.—The deaths registered from diphtheria in London last week only amounted to 20, an abnormally low figure as compared with 31, 39, and 27 in the preceding three weeks. Not only, however, was the total of last week below the number of deaths registered from the disease in London during many months past, but it was as much as 17 under the corrected decennial average for the corresponding week of the period 1888–97. Three deaths were those of persons belonging to the Poplar sanitary area. All the deaths were of persons under twenty years of age, though only two were of infants. The admissions to hospital showed no falling off, being 131, against 105, 110, and 133 in earlier weeks, whilst there remained 949 patients under isolation for diphtheria on Saturday last, as compared with 942 on the Saturday preceding, and 930 on the last day of April. The deaths registered from the disease in the Outer Ring also showed a diminution, 10 being the total, of which 3 occurred in Edmonton and 3 in West Ham registration districts.

BRITISH LARYNGOLOGICAL, RHINOLOGICAL, AND OTOLOGICAL ASSOCIATION.—A meeting of this society was held on April 29th, Dr. Dundas Grant, President, being in the chair. Dr. Barclay Baron (Bristol) showed a case of Cyst of the Epiglottis in a middle-aged man. There were practically no symptoms, merely a tendency to "hawking" which was probably due to elongation of the uvula. On the lingual surface of the epiglottis there were two cysts, one about ½ in. across, covered with thick mucous membrane, with dilated vessels on its surface and another of about the size of a pea.—Mr. Wyatt Wingrave showed a woman, aged sixty-six years, from whose right vocal cord a fibroma had been removed six months previously with a Krause's snare. There had been no return. He also showed a similar case in a man, aged thirty-eight years, where a fibroma had been partially removed from the right vocal cord by Dr. Dundas Grant's laryngeal cutting forceps. The structure was an angio-fibroma and recurrence was taking place.—Dr. Brown Kelly (Glasgow) read a paper on Cysts of the Floor of the Nose. He described 3 cases of his own and referred to 9 others which have been recorded. In all of these the cyst appeared at the anterior end of the floor immediately behind the junction of the skin and mucous membrane. He had found large ducts in this region, which indicated the probable origin. The most marked sign was prominence of the ala nasi of the affected side. The cyst might be treated from the nose, but when large it should be dissected out from the gingivo-labial fold.—Mr. Wyatt Wingrave read the notes of 3 cases of Lupus of the Nose in which the new tuberculin had been employed by Mr. Lennox Browne and himself. The results did not appear to be encouraging.—The President cited a case of Lupus of the Cheek shown by Dr. Heron at the Clinical Society, where healing had resulted from the injection of new tuberculin.—Mr. Stoker showed a case of Rodent Ulcer of the Nose and a case of Lupus of the Face treated by concentrated sun's rays applied by means of a bi-convex glass lens of 4 in. focus. The results of a series of observations as to the penetrating effect of sun's rays on raw meat had led him to adopt this treatment, which so far had realised his hopes. The President brought forward several cases of Chronic Dry Catarrh of the Middle Ear of the Sclerotic Type. These had resisted the usual methods of treatment and he had tried the effect of mechanical vibration applied to the dorsal spine. Under this "indirect massage" of the tympanitic structures (presumably of the stapedio-vestibular articulation) considerable improvement had taken place, as was shown by several of the cases presented.

THE LATE DR. HAMILTON KINGLAKE. — Dr. Hamilton Kinglake of Taunton, who died there on May 7th, was a son of the late Mr. William Kinglake of Taunton and the last surviving brother of the late Mr. Alexander William Kinglake, the historian of the Crimean War. Dr. Kinglake graduated as M.D. at Edinburgh University in 1837.

A DAY OF REST IN THE COUNTRY FOR THE METROPOLITAN NURSES.—On Friday, June 3rd next, an opportunity will be offered to the nurses of the metropolitan hospitals and nursing institutions to enjoy a day in the country at Hertingfordbury. Three short services will be given in the parish church with addresses by the Bishop of Thetford. The expense to those attending will not exceed 2*s.* 6*d*, inclusive of the journey from town. Those who may desire to be present should communicate as soon as convenient with the Rev. A. B. Locke, St. George's Hospital, S.W., or with the Rev. Canon Burnside, Rector, Hertingfordbury, Hertford.

CORPORATE AND MEDICAL REFORM COMMITTEE.—A meeting of the executive committee was held on May 14th, Dr. T. Granville Hockridge being in the chair. A letter was read from Dr. D. C. McVail (Crown Representative of Scotland on the General Medical Council), acknowledging the letter adopted at the previous meeting of this committee, thanking Dr. McVail for his action in opposition to the principle of registering and recognising midwives at the recent special meeting of the General Medical Council. On the memorial addressed by the committee to the Home Secretary opposing the registration of midwives a statement of the danger and impolicy of such registration prepared by Mr. R. B. Anderson to accompany the memorial, with a prefatory note by a select committee consisting of the chairman (Dr. T. Granville Hockridge), Dr. Boyd Joll, and Dr. Tom R. Taylor, was approved and adopted. The statement included a statement of the case for the registration of midwives communicated by Mr. F. Rowland Humphreys, honorary secretary of the Midwives Bill Committee, with comments thereon. Mr. Anderson stated that he was making arrangements for the publication [of the memorial, prefatory note, and statements. On consideration of the fourth report of Mr. Victor Horsley to the registered practitioners of England and Wales the following resolution was unanimously adopted: "That the President be requested to convey to Mr. Victor Horsley, F.R.S., the thanks of this committee for his fourth report to them and other members of his constituency." Certain resolutions were also directed to be sent to Mr. Horsley. The letter of the chairman and honorary secretaries to the Council of the Royal College of Surgeons of England covering copy of Protest and Claim of Right of Members and Fellows to elect the Representative of the College on the General Medical Council was approved and adopted. (It was forwarded last week.) The following reply has been received:—

Royal College of Surgeons of England,
13th day of May, 1898.

GENTLEMEN,—I am directed to inform you that your letter of the 7th inst. and accompanying statement of Protest and Claim have been laid before the Council of the College.

I am, Gentlemen, your obedient servant,
SIBERT COWELL, Assistant Secretary.

T. Granville Hockridge, Esq.
Tom R. Taylor, Esq.
R. B. Anderson, Esq.

A resolution was unanimously adopted inviting Mr. George Jackson to permit himself to be nominated as a candidate for the approaching election to the College Council in support of the policy of the committee and therewith the following resolution was adopted:—

That in order to promote the best interests of the body corporate the Royal College of Surgeons of England, by advancing the right of Fellows and of Members to elect the Representative of the College on the General Medical Council and the claim of the Members to representation on the Council of the College in accordance with the vote of the meeting of Fellows in January, 1896, the President is requested to convey to Mr. Horsley this resolution of this sub-committee by way of

invitation to permit himself to be nominated for election to the College Council at the ensuing elections thereto and to coöperate in inviting the support of the Association of Fellows of the College in these several respects in accordance with its past policy and as the best mode of access to the body of Fellows.

MEDICAL MAGISTRATE.—The Lord Chancellor has appointed Mr. Walter A. Satchell, F.R.C.P. Edin., M.R.C.S., of Ealing, a justice of the peace for the county of Middlesex.

THE LATE MR. EMIL ARNOLD PRAEGER.—Mr. Praeger, whose death is announced as having taken place at Los Angeles, California, U.S.A., on March 6th, had been in practice in that city for about four years, during which time he had become so popular with his medical brethren that he was this year unanimously chosen president of the county medical society. He was a native of England and held the qualifications of L.F.P.S. Glasg. and L.S.A., both of which he took in 1883, afterwards spending a short time in Africa and also practising in England. Some twelve or fourteen years ago he commenced practice in British Columbia and became surgeon to the Vancouver Mining Company there, but on account of the illness of a daughter he sacrificed this position and went to Los Angeles. The *Southern Californian Practitioner* contains a very sympathetic notice of his life and last illness and adds that "he held various important offices in the society, was a regular attendant at all medical meetings, was elected a member of the Faculty of the Medical College, and last year the *Practitioner* was fortunate in securing him for its editorial staff." Mr. Praeger was forty-three years of age. He has left a widow and three children.

QUEEN'S COLLEGE, BELFAST: SESSION 1897-98.—At the class examinations in the Faculty of Medicine recently held in the above College the following prizes were awarded:—Zoology—Senior Division: Frederick Wm. Stewart. Junior Division: Robert James Bethune, Sydney Herbert George Blakeley, Henry Mulrea Johnston, and Thomas Carnwath and James Kennedy Small (equal). Chemistry—Senior: Andrew Adams Rutherford. Junior: James Kennedy Small and Henry Mulrea Johnston. Practical Chemistry—Senior: Thomas Bernard Vinycomb. Junior: Hugh Beaumont Smith and Wm. John Brereton Fergus. Systematic Anatomy—Senior: John Elder M'Ilwaine, John Campbell Rankin, and Hugh Barkley Steen. Junior: David M'Mordie, Albert Lytle Black, and Samuel Robert Hunter. Practical Anatomy—Senior: John Elder M'Ilwaine and John Hope Reford, B.A. (equal), and Thomas Stratford Logan. Second Year: Archibald George Heron and David M'Mordie (equal). First Year: Robert Alexander Stewart. Physiology and Histology—Senior: John Elder M'Ilwaine and Hugh Barkley Steen (equal), and John Campbell Rankin. Junior: Samuel Robert Hunter, Walter Phillips, and Frederick William Stewart. Practical Physiology and Histology—Hugh Barkley Steen, John Charles M'Carroll, Walter Phillips, and John Campbell Rankin. Medicine—William Robert Wilson (non-matriculated) and John Thomas Bradley. Surgery—Senior: Annie Helen Crawfurd and Robert Alister Little Graham, B.A. (equal), and John Edmund Clements. Junior: William Hunter Matthew, John Weir West, and William Robert Wilson (non-matriculated). Materia Medica—Charles James Ross, B.A., and Thomas Stratford Logan. Midwifery, Gynæcology, and Diseases of Children—John Edmund Clements, John Thomas Bradley, and William Robert Wilson (non-matriculated). Ophthalmology and Otology—W. Matthew Hunter, Robert Alister Little Graham, B.A., and John Weir West. Sanitary Science—William Matthew Hunter and John Weir West.

PRESENTATIONS TO MEDICAL MEN.—Mr. Herbert Burland, L.R.C.P. Lond., M.R.C.S. Eng., of Finedon, Wellingborough, on April 22nd was presented on his approaching marriage by his friends and residents in that town with an address and a dog-cart as marks of esteem.—At a large and representative meeting held in the parish hall, Sedgefield, on April 23rd, Mr. G. R. Sheraton, L.R.C.P. Edin., M.R.C.S. Eng., of that town, on his retirement from professional life was the recipient of a gold hunting watch, chain, and pendant, and at the same time Mrs. Sheraton was presented with a silver tea and coffee service as tokens of regard.—In appreciation of services gratuitously rendered to the under-mentioned ambulance classes presentations have recently been made to Mr. Thomas M. Martin, M.B. Edin., of Lochwinnoch, of a revolving study chair by the members of the Diamond Jubilee Howwood Ambulance classes, and to Mr. W. Mawer, L.S.A., of Tollesbury, Witham, of a silver-mounted walking stick.—On April 26th, at the town-hall, Wiveliscombe, Somerset, Mr. J. Wyatt Pratt, M.R.C.S. Eng., L.R.C.P. Edin., on the occasion of his silver wedding, was presented by the inhabitants of the town, as a mark of their respect and esteem, with a silver tea and coffee service with tray.—In connexion with the successful ambulance classes conducted at Tow Law, county Durham, during past winter, Mr. Wm. Tiplady, L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., the instructor, has been presented by the female class with a china salad bowl with silver rim and service to match, while the male class has given him an eight-day marble timepiece with chimes, as tokens of gratitude for his services to the classes.—On May 9th, on the occasion of closing the Whittington Moor ambulance classes, which have been successfully conducted by Mr. Thomas McClure, M.D. Brux., L.R.C.P. Edin., F.R.C.S. Irel., he was the recipient of a marble timepiece bearing the following inscription: "Presented to Dr. McClure by the members of the Whittington Moor and Sheepbridge Ambulance Class, May 10, 1898."—At a meeting at the Wesleyan school-room, Harrogate, on May 9th, Mr. A. W. H. Walker, M.D. Brux., L.R.C.P. Lond., M.R.C.S. Eng., was presented with an electric medical battery by the members of the Wesley Guild Ambulance Class.

Parliamentary Intelligence.

NOTES ON CURRENT TOPICS.

The Vaccination Bill.

THE House of Commons has referred the Vaccination Bill to the Grand Committee on Law and to assist in the consideration of the Bill there have been added to the committee the following members, viz.: The Attorney General for England, Mr. Thomas Bayley, Sir Charles Cameron, Mr. Channing, Mr. Chaplin, Sir Charles Dalrymple, Sir Walter Foster, Mr. Hazell, Colonel Long, Mr. T. P. O'Connor, Sir William Priestley, General Russell, Mr. T. W. Russell, Mr. Steadman, and Mr. J. W. Wilson. The committee is not expected to reach the Bill until after the Whitsuntide recess.

HOUSE OF COMMONS.

THURSDAY, MAY 12TH.

Phosphorus Poisoning.

Mr. Pickersgill asked the Home Secretary whether, in accordance with his promise given on the 2nd inst., he had made further inquiry into the case of Cornelius Lean, lately employed at the match factory of Messrs. Bryant and May, who was poisoned by the yellow phosphorus used in the manufacture; whether he proposed to direct that proceedings shall be taken against the occupier of the factory and the factory medical officer respectively for neglecting to give the notices required by section 29 of the Factory Act, 1895; and whether it was intended to prosecute the factory medical officer, under the Registration of Births and Deaths Act, upon a charge of wilfully misstating the cause of death upon the medical certificate.—Sir M. White Ridley replied: The inquiries which have been made reveal, I regret to say, systematic neglect on the part of this firm to comply with the obligations as to reporting cases of phosphorus poisoning. The case appears to me to be a very serious one and I have given instructions for the prosecution of the occupiers. As regards the factory medical officer I cannot see sufficient ground for supposing that, as suggested by the hon. member, he made a wilful misstatement as to the cause of death in the case of Lean. In previous cases, however, of phosphorus poisoning he appears to have committed a breach of the Factory Acts in not notifying the fact to the chief inspector, but as he notified them to the employer and as it seems possible he was under a *bonâ-fide* belief that that was all that was required of him I have decided not to take proceedings against him.—Sir Charles Dilke asked whether any inquiry was going to be held into the question of the use of yellow phosphorus and whether the former committee could be revived for this purpose.—Sir M. White Ridley replied that he thought it desirable to have an inquiry, but he was not able to say what form it would take.

Vaccination Questions.

Mr. Brigg addressed to the President of the Local Government Board the following five questions, viz.: (1) if he was aware that the council of the Association of Public Vaccinators had declared that the time and trouble required under the proposed Vaccination Bill would be ten times that now paid for, thus increasing the probable cost to the ratepayers from £78,000 per annum to £780,000 per annum, and could he hold out any hope that this largely increased cost would be taken over by the Imperial Exchequer; (2) if he was willing to accede to the wish of the council of the Association of Public Vaccinators that a public vaccinator should no longer be engaged by the board of guardians, but be appointed direct by the Local Government Board, thus removing every vestige of popular control or influence; (3) respecting the Vaccination Bill, if the public vaccinator having received part of his fee on the birth of a child would receive the second moiety of his fee in cases where he instituted proceedings but failed to enforce vaccination; (4) if the refusal of a board of guardians to sanction the costs of prosecutions under the Vaccination Bill would subject them

to imprisonment for contempt of court; and (5) if, in cases of the refusal of parents to allow their children to be vaccinated on account of ill-health or what might appear to them some other good reason, would the power of instituting legal proceedings rest with the vaccinator without any other reference or appeal either to guardians or medical authority.—Mr. Chaplin replied: With regard to the first question I am not aware that the council of the association referred to have made any such estimate of the cost. In any case my view is altogether different from that stated in the question, and I have no belief in the increase suggested. The reply to the next two questions is in the negative. With regard to the next question I am afraid I have nothing to add to the answer which was given on Tuesday to the question of the hon. member for the Chesterfield Division—viz., that I have no right to assume that local authorities will refuse to pay any expenses legally payable by them, and I cannot undertake to reply to hypothetical questions. As to the next question it would not, I think, be correct to say that the powers of a vaccination officer, who, I presume, is the officer intended to be referred to, of instituting legal proceedings would rest with that officer without reference to any other authority. They will be subject to certain conditions. If the child were unfit to be vaccinated through ill-health or otherwise and the parent procured a certificate from a medical practitioner to that effect it would be a bar to proceedings under section 29 of the Act of 1867, so long as the certificate continued in force. Further, the section referred to provides that a parent will be guilty of an offence for not causing the child to be vaccinated only in the absence of a reasonable excuse being rendered by him to the satisfaction of the justices.

The Army Medical Service.

In reply to questions on this subject by Dr. Farquharson and Sir William Priestley Mr. Powell Williams said: The Royal Warrant relating to the Army Medical Service will be issued as soon as certain minor details which involve reference to India can be settled. It will provide for the creation of a Royal Army Medical Corps, the members of which up to the rank of colonel will bear military titles, the present compound title being abolished. Above the rank of colonel the members of the corps will bear the title of surgeon-general, with the precedence and privileges of major-generals of the army, such as they now enjoy.—Major Rasch asked whether it was in contemplation to confer the title of general upon veterinary surgeons as well.—Mr. Powell Williams: No. I do not think the matter has been taken into consideration.

Sickness on the "Britannia."

Lord Charles Beresford asked the First Lord of the Admiralty whether he would lay before the House a return showing the cases of sickness on the *Britannia* between Jan. 1st and May 1st and stating the opinion of the medical officers as to whether this outbreak of sickness was attributed in any degree to improper feeding.—Mr. Goschen replied: No public school publishes lists of schoolboy ailments and there is no reason why the *Britannia* should do so. Surely the noble lord does not wish to alarm anxious parents quite unnecessarily by an official list of such ailments described in technical medical language. But to allay any apprehension which the noble lord's question may have caused, I may state that though there have been a good many cases of mumps and measles, as there have been in many schools during the same period, I am assured that in other respects there has been no exceptional sickness in the *Britannia*. If the noble lord will state to me on what authority he puts forward the innuendo as to improper feeding I will give him an answer.—Lord Charles Beresford said that he had received several letters from the parents of boys on the *Britannia* complaining that a great number of them had had boils and other symptoms of improper treatment and he thought it right to clear up the matter.—Sir Charles Dilke said that he had received complaints in regard to the meat supplied.—Mr. Goschen said that the innuendo was that the medical officers had ascribed the sickness to improper feeding. There was no proof whatever of that suggestion. If cases were brought before him in reference to any defects of diet of course inquiry would be made. He had heard that there had been some inquiry in reference to the meat, but the medical officers reported that there had been no exceptional sickness and no sickness had been ascribed to improper feeding. He regretted that any public statement should unnecessarily alarm the parents of the boys.

Medical Service in Uganda.

Captain Norton asked the Under Secretary of State for Foreign Affairs whether it had been brought to his notice that a recent military expedition in Uganda was actually sent on active service without a medical officer to look after the sick and wounded, and that Captain Dunning, D.S.O. Royal Fusiliers, who was seriously wounded, lived for some days in great agony; further, that there was every reason to believe that his life would have been spared had he received even ordinary medical aid; and would he explain why medical volunteers for this service, who could easily have been obtained in this country, were not called for.—Mr. Curzon replied: The incident alluded to occurred in March, 1895, before the present Government came into office. The arrangements for the expedition in question were made by the officer commanding the troops in Uganda. There were at the time only three medical officers attached to the Uganda staff, none of whom unfortunately was available for the expedition, which could not for military reasons be postponed to admit of volunteers being procured from this country. The number of medical officers on the Uganda staff has recently been raised to 12.

FRIDAY, MAY 13TH.

Milk Prosecution.

Major Rasch asked the President of the Local Government Board whether his attention had been called to the case of a farmer selling milk treated with boracic acid and fined at the Marylebone police-court on Wednesday; and if he would state on what grounds the English producer was punished for selling that which the foreigner placed on the home market without any restriction or liability.—Mr. Chaplin replied: I have seen the report of the case referred to. The offence, as I understand, was of having given a false warranty in respect of milk. The provisions of the law as regards the sale of milk produced in this country and treated with boracic acid apply equally to the sale of imported milk so treated.

Cases of Phosphorus Poisoning.

Mr. Pickersgill asked the Home Secretary if he would inquire into the case of a young woman named Tye, living at 47, Beaufoy-road, Plaistow, who twelve months ago while working at the match factory of Messrs. Bryant and May was attacked by phosphorus poisoning and has since been attended by Mr. Cornelius Garman, the medical officer of the firm, or by his son Mr. Bernard Garman; and, if the notices required by the Factory Act had not been given in this case, would he take steps to enforce the law.—Mr. Pickersgill also asked the right hon. gentleman whether he would inquire into the case of Ellen Cotter, living at 10, Branley-cottages, St. Leonard's-road, Bromley, E., who in August last, while working at the match factory of Messrs. Bryant and May, was attacked by phosphorus poisoning and had since been attended by Mr. Cornelius Garman, the medical officer of Messrs. Bryant and May, and his son Mr. Bernard Garman; and, if the notices required by law had not been given in this case, would he take steps to prosecute the parties in default.—Sir M. White Ridley replied: These cases are among the cases which I mentioned in my answer yesterday and in which I have ordered a prosecution.

The Vaccination Question.

Mr. Goddard asked the President of the Local Government Board if he would authorise magistrates who had convicted defaulters under the Vaccination laws to give a reasonable allowance of time in which to pay their fines before committing them to gaol or issuing distress warrants on their goods.—Mr. Chaplin said that he was advised that the magistrates had power now to allow time for the payment of the penalty or to allow payment by instalments or to allow securities to be taken, but he (Mr. Chaplin) had no power whatever to give any direction or authority to the magistrates in connexion with their convictions.—Mr. Brigg asked the President of the Local Government Board if he was aware that the feeling of a portion of the people in this country was such that in a printed statement, signed by four metropolitan public vaccinators, it was declared that domiciliary vaccination would render the public vaccinator liable to personal insult, and that they suggested other means whereby witnesses might be present when vaccination was offered; and would he take steps that the suggestion offered, or others for the same purpose, should be adopted as a precaution against such insults.—Mr. Chaplin replied that he was aware of the statement referred to, but he thought it would be quite unnecessary to provide by the Bill that a public vaccinator should be accompanied by a witness on the occasion of his visits.

The Nursing Staff for the "Britannia."

Mr. Ascroft asked the First Lord of the Admiralty whether he was aware that on Jan 14th a copy of the *Navy and Army Illustrated* was sent to every parent of a cadet on the *Britannia* containing a photograph of the nursing staff at the Britannia Hospital; whether he was aware that the females in such photographs attired in nurses' uniforms were the domestic servants and not qualified nurses; whether any, and if so, what, and on what date, qualified nurses were appointed to attend the cadets of the *Britannia* when sent to the hospital; whether he was aware that on the *Conway* and at most of the public schools a qualified medical matron was engaged to look after the sick patients and due notice was given of such sickness to the parents; and whether he would make arrangements that a similar notice should in future be given when any cadets were invalided at the *Britannia* Hospital.—Mr. Austen Chamberlain replied on behalf of the First Lord as follows: The hon. member has sent me a copy of the paper referred to. It contains not only photographs of the nursing staff of the *Britannia*, but also other photographs illustrative of life on the ship. Though, without time for inquiry, I am unable to say by whom the paper was circulated, I feel confident that it was not circulated officially at the public expense as the question would seem to suggest. The photograph represents the ordinary hospital staff, including a trained sister and a trained female nurse, the former appointed in 1894, the latter added in 1896. Both these ladies had long training in civil hospitals and were specially selected on account of their fitness for the positions. The impression that there were no female nurses probably arose from the fact that this is the ordinary nursing staff for the ordinary sick quarters, whilst in a separate house, which is opened when required for infectious cases, there are trained members of the naval sick berth staff. Great care is exercised in their selection to secure the best men. Notice of any cadet being sent to sick quarters is always given to the parents. Perhaps the House will allow me to add, in reference to questions addressed to the First Lord yesterday, that the following telegram was sent to the captain of the *Britannia* this morning:—"Is there any foundation for complaints as to quality of food?" To this inquiry we have received the following reply:—"No. Absolutely without foundation. Captain, *Britannia*."

MONDAY, MAY 16TH.

Food Analysis.

Mr. A. K. Loyd asked the President of the Local Government Board whether, having regard to the success of the inspector employed by the Royal Lancashire Agricultural Society in 1896 in distinguishing impure from genuine butter by simple inspection, he would consider the desirability of placing the services of a few similarly trained specialists at the disposal of local authorities desirous of such assistance before submitting samples to the public analysts; whether samples for analysis selected by the diligence and self-interest of private purchasers show a higher percentage of adulteration than samples submitted more or less at random, by local authorities; and whether private purchasers had since 1896 shown signs of becoming more alive to their rights and powers under the Sale of Food and Drugs Acts and the Margarine Act, 1887.—Mr. Chaplin replied: I am aware of the proceedings of the inspector referred to, but the Local Government Board have neither the duty nor the power to place specialists at the disposal of the local authorities as suggested. The number of samples submitted for analysis by private purchasers in 1897 exclusive of those submitted by the inspector referred to was about the same as in 1896. They show a higher percentage of detected adulterations than samples submitted by the local authorities.

Remarkable State of Things at Southwark.

Sir Charles Cameron asked the Home Secretary whether his attention had been called to the statement that the remains of between 1000 and 2000 bodies had been found in the crypt of St. George-the-Martyr, Southwark, the coffins in which they had been placed having been burst open by dishonest persons

who had managed to break into the crypt and had stolen the lead; whether he had seen a report by Mr. Wanklyn and Mr. W. Cooper, analytical chemists, to the effect that the atmosphere of the church was contaminated by the passage of air from the crypt to such an extent as to render it dangerously impure; whether he was aware that the vestry refused to incur the expense of removing the remains and were in favour of waiting until the noxious fumes exhausted themselves; and whether the Home Office proposed to take any steps in the matter.—Sir M. White Ridley replied: My attention has been called to this statement. The inspector of burial grounds will thoroughly investigate the matter this week and his report will receive immediate attention.

BOOKS, ETC., RECEIVED.

ALLEN, W. H. AND CO., Henrietta-street, London, W.C.
Indian Snake Poisons: their Nature and Effects. By A. J. Wall, M.D. Lond. 1898.

APPLETON, D., AND CO., New York.
Brief Essays on Orthopædic Surgery. By Newton M. Shaffer, M.D. 1898.

BAILLIÈRE, TINDALL, AND COX, King William-street, Strand, London.
A Manual of Surgery. By W. Rose, M.B., B.S. Lond., F.R.C.S., and Albert Carless, M.S. Lond., F.R.C.S. 1898. Price 21s. net.
Applied Bacteriology. By T. H. Pearmain and C. G. Moor, M.A. Cantab. Second Edition. 1898. Price 12s. 6d. net.

BAILLIÈRE, J. B., ET FILS, Paris.
La Grippe. Par L. Galleard. 1898.

BAUERMEISTER, F., Glasgow.
Verhandlungen der vierzehnten Versammlung der Gesellschaft für Kinderheilkunde. Herausgegeben von Dr. E. Pfeiffer. 1898.
Das Sideroskop und Anwendung. Von R. Asmus. 1898.
Die Arbeit der Verdauungsdrüsen. Von Professor J. P. Pawlow und Dr. A. Walther. 1898.
Die Infectiös-eiterigen Erkrankungen des Gehirns und Rückenmarks. Von Wm. Macewen, M.D., und von Dr. P. Rudloff. 1898.
Lehrbuch der Histologie des Menschen. Von A. A. Bohm und M. von Davidoff. II. Auflage. 1898.

BRAUMULLER, W., Wien und Leipzig.
Archiv für Dermatologie und Syphilis. 43. und 44. Bände. Von Professor F. J. Pick. I. und II. Theile. 1898.

CARRÉ, GEORGES, ET C. NAUD, Paris.
Les Cancers Épithéliaux: Histologie, Histogénèse, Étiologie, Applications thérapeutiques. Par Fabre-Domergue. 1898.

CASSELL AND CO., London.
Tropical Diseases. A Manual of the Diseases of Warm Climates. By Patrick Manson, M.D., LL.D. Aberd. Illustrated. 1898. Price 10s. 6d.

CHURCHILL, J. & A., Great Marlborough-street, London.
Chavasse's Advice to a Mother. By Geo. Carpenter, M.D. Lond. 1898. Price 2s. 6d.
Chavasse's Advice to a Wife. Revised by F. Barnes, M.D., F.R.C.S. 1898. Price 2s. 6d.
The Blood: How to Examine and Diagnose its Diseases. By Alfred C. Coles, M.D. Illustrated. 1898. Price 10s. 6d.

F. A. DAVIS COMPANY, Philadelphia.
Annual and Analytical Cyclopædia of Practical Medicine. By C. E. de M. Sajous, M.D., and Others. Illustrated. Vol. I. 1898.

GRIFFIN, CHARLES, AND CO., Exeter-street, Strand, London.
Forensic Medicine and Toxicology. By D. Mann, M.D., F.R.C.P. 1898. Price 21s.

HIGGINBOTHAM AND CO., Round Road, Madras.
Outlines of Medical Jurisprudence for India. By J. D. B. Gribble, M.R.C.S., and P. Hehir, M.D., B.Sc. Edin., D.P.H. Camb. Fourth Edition, edited by Surgeon-Major P. Hehir, M.D. 1898.

IMPRENTA DE MANUEL ALUFRE, Valencia.
Valencia, como Estacion Invernal. Par Vincente Guillen y Marco. 1898.

KIMPTON, H., High Holborn, London; and HIRSCHFELD BROS., Bream's-buildings, Fetter-lane, London.
Operative Gynæcology. By Howard A. Kelly, A.B., M.D. Vol. I. 1898. Price 31s. 6d.

LEWIS, H. K., Gower-street, London.
A Treatise on Aphasia and other Speech Defects. By H. C. Bastian, M.A., M.D. Lond., F.R.S. Illustrated. 1898. Price 15s.
Asiatic Cholera: its History, Pathology, and Modern Treatment. By A. J. Wall, M.D. Lond. 1893.

LIVINGSTONE, E. & S., Edinburgh.
The Botanist's Vade-Mecum. Compiled by John Wishart. 1898. Price 2s. net.

LONGMANS, GREEN, AND CO., Paternoster-row, London.
On Failure of Brain Power (Encephalasthenia): its Nature and Treatment. By Julius Althaus, M.D., M.R.C.P., M.R.I. Fifth Edition. 1898. Price 5s. net.
Elementary Practical Zoology. By Frank E. Beddard, M.A. Oxon., F.R.S. 1898. Price 2s. 6d.

MASSON ET CIE, Paris.
L'Allaitement mixte et l'Allaitement artificiel. Par H. de Rothschild. 1898.
L'Oreille: IV., Symptomatologie, et V., Pathologie. Par Pierre Bonnier.

MEDICAL PUBLISHING COMPANY, Clinical Journal Office, Bartholomew-close, London, E.C.
On the Treatment of Uterine Myomata (Fibroids). By J. Bland Sutton. Price 3s. 6d.

NEW SYDENHAM SOCIETY, London.
An Atlas of Illustrations of Pathology, compiled for the New Sydenham Society. Fasciculus XI., Diseases of the Nerves. Plates 50 to 65. 1898.

SCIENTIFIC PRESS, Southampton-street, Strand, London.
The Burdett Series, No. 5. Notes on Pharmacy and Dispensing for Nurses. By C. J. S. Thompson. 1898.

SIMPKIN, MARSHALL, HAMILTON, AND CO., Stationers' Hall-court, London.
The Epic of Sounds. An Interpretation of Wagner's Nibelungen Ring. By Freda Wineworth. Second Edition. 1898. Price 3s. 6d.

STOCK, ELLIOT, Paternoster-row, London.
Scientific Method in Biology. By Dr. Elizabeth Blackwell. 1898.

UNWIN, T. F., Paternoster-buildings, London, E.C.
Masters of Medicine. William Stokes. His Life and Work (1804-1878). By his son, William Stokes. 1898. Price 3s. 6d.

WATTS AND CO., Johnson's-court, Fleet-street, London.
Responsible or Irresponsible? Criminal or Mentally Diseased? A Plea for the Unjustly Convicted, and on the Cause of Crime. By H. Smith (Jena). 1898. Price 1s.

WRIGHT, J., AND CO., Bristol.
Diseases of the Upper Respiratory Tract. The Nose, Pharynx, and Larynx. By P. W. Williams, M.D. Lond. Third Edition. Illustrated. 1898. Price 8s. 6d.

French Self-taught, with Phonetic Pronunciation: by C. A. Thimm F.R.G.S. (E. Marlborough and Co., Old Bailey, London); price 1s. 6d.—Tubal Gestation, with Special Reference to its Early Diagnosis and Treatment: by C. J. Cullingworth, M.D., D.C.L. (Hon.) Durh., F.R.C.P. (The Medical Publishing Company, Clinical Journal Office, Bartholomew-close, London, E.C.); 1898; price 2s.

Appointments.

Successful Applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

ALTHORP, C. F. M., M.B. Lond., M.R.C.S., L.R.C.P. Lond., has been appointed Honorary Surgeon to the Bradford Royal Infirmary, vice John Appleyard, resigned.

ASKINS, J. F., M.R.C.S. Eng., L.R.C.P. Lond., has been appointed Medical Officer to Messrs. Tangye's Cornwall Works, Smethwick, Birmingham.

BELDING, D. T., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer of Health by the Mitford and Launditch Rural District Council, vice M. G. Dundas, resigned.

BOISSIER, A. H., L.R.C.P. Lond., M.R.C.S. Eng., has been appointed an Honorary Medical Officer to the Horton Infirmary, Banbury.

BOWES, C. K., M.D. Oxon., B.Ch., has been appointed Medical Officer for the St. Anne's Home at Herne Bay.

BROWN, R., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the First Sanitary District of the Hackney Union.

BURGESS, A. H., M.B., Ch.B. Vict., L.R.C.P. Lond., M.R.C.S. Eng., has been appointed Assistant Medical Officer for the Crumpsall Workhouse of the Township of Manchester.

CARSTAIRS, J. L., M.B., C.M. Glasg., has been appointed a Physician to the Glasgow Central Dispensary, vice A. Sloan, resigned.

CAYLEY, F. P., L.R.C.P. Lond., M.R.C.S., has been appointed Clinical Assistant for the Infirmary of the Whitechapel Union.

CHETWOOD-AIKEN, K. C., M.B., C.M. Aberd., has been appointed Ophthalmic Surgeon to the Royal Cornwall Infirmary, vice G. F. Helm.

COOPER, W. H., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Staveley Sanitary District of the Kendal Union.

CRAIG, J. W., M.D. Glasg., M.R.C.S., has been re-appointed Medical Officer of Health by the Bingley District Council.

DE GRUCHY, C. W., L.R.C.P. Lond., M.R.C.S., has been re-appointed Medical Officer of Health by the Caerleon Urban District Council.

DINGLE, C. V., M.B., B.S. Durh., has been appointed Medical Officer for the Middlesborough Corporation, vice J. A. Malcomson.

EDWARDS, H. J., L.R.C.S., L.R.C.P. Edin., D.P.H. Lond., has been appointed an Honorary Medical Officer to the Horton Infirmary, Banbury.

EHRMANN, A., M.R.C.S., L.R.C.P., has been appointed a Clinical Assistant to the Chelsea Hospital for Women, Fulham-road, London, S.W.

GRAHAM, S., L.R.C.P. Lond., has been appointed Resident Medical Superintendent for the District Lunatic Asylum, County Antrim.

HARDWICK, GEO., M.R.C.S., L.R.C.P., has been appointed Resident Medical Officer at the Ida Hospital, Leeds.

HILLMAN, G. B., L.S.A., has been re-appointed Medical Officer of Health by the Whitwood Urban District Council.

KEATS, W. J. C., L.R.C.P. Lond., M.R.C.S., D.P.H., has been appointed Medical Officer for the Infirmary, and Gordon-road Workhouse, of the Parish of St. Giles, Camberwell.

MACGREGOR, G, R , M.D. Aberd., has been re-appointed Medical Officer of Health (Bingley Outer) by the Bingley District Council.

MARKLEY, H., M.R.C.S., L.R.C.P., has been appointed a House Surgeon at the Ida Hospital, Leeds.

NEWELL, ALFRED GEORGE, M.B., M.C. Glasg., D.P.H. Cantab., L.M. Dubl., has been appointed Assistant Medical Officer at the Three Counties' Asylum, near Hitchin.

OVEREND, W., M.D., B.Ch., has been appointed a Clinical Assistant to the Chelsea Hospital for Women, Fulham-road, London, S.W.

PIERSON, C., M.R.C.S., L.R.C.P., has been appointed a House Physician at the Ida Hospital, Leeds.

SHILLITO, W. A., M.D. Brux., M.R.C.S., has been appointed a Medical Officer by the Bingley District Council.

SIMPSON, G. B., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Medical Officer for the Lastingham Sanitary District of the Pickering Union.

SMITH LLOYD, G., M.D. Edin., L.R.C.S., has been appointed a Physician to the Monmouth Hospital and Dispensary, vice G. Willis, resigned.

TALBOT, F., M.R.C.S., L.R.C.P., has been appointed a House Surgeon at the Ida Hospital, Leeds.

THOMSON, WM. T., M.B., C.M. Edin., has been appointed an Honorary Medical Officer for the Liverpool Ladies' Charity and Lying-in Hospital.

TURNER, A. F., L.R.C.P., L.R.C.S. Edin., has been appointed Medical Officer of Health for the Borough of Tewkesbury.

VEALE, H., L.S.A., has been appointed a House Physician at the Ida Hospital, Leeds.

VLIELAND, C. J., M.D. Durh., M.R.C.S., has been appointed Medical Officer of Health by the St. Thomas (Exeter) Urban District Council.

WILLIS, GEO., M.D. Glasg., L.R.C.S. Edin., has been appointed an Honorary Consulting Physician to the Monmouth Hospital and Dispensary.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

BRENTFORD UNION.—Dispenser for the Infirmary, Workhouse, and Schools at Isleworth. Salary £100 per annum, with dinner and tea daily. Applications to the Clerk, Union Offices, Isleworth, Middlesex.

BRISTOL EYE HOSPITAL.—House Surgeon. Salary £60, with board and lodging.

BURTON-ON-TRENT INFIRMARY.—House Surgeon. Salary £130 per annum, with rooms in the Infirmary free, also coals and gas.

CARDIFF INFIRMARY.—Assistant House Surgeon and Assistant House Physician, for six months. Board, washing and apartments provided.

CHESTERFIELD AND NORTH DERBYSHIRE HOSPITAL AND DISPENSARY, Chesterfield.—Resident Junior House Surgeon and Dispenser. Salary £50 per year, with board, apartments, and laundress.

COUNTY ASYLUM, Whittingham, Lancs.—Locum Tenens for about five or six months. Two guineas a week.

DONCASTER GENERAL INFIRMARY AND DISPENSARY.—In-door Dispenser and Assistant to the House Surgeon. Board, lodging, and washing provided.

DUMFRIES AND GALLOWAY ROYAL INFIRMARY, Dumfries.—House Surgeon. Salary £50 per annum, with board and washing.

EAST LONDON HOSPITAL FOR CHILDREN AND DISPENSARY FOR WOMEN, Glamis-road, Shadwell, E.—House Physician for six months. Board, residence, &c., provided and an honorarium of £15 15s. will be granted on the completion of six months' approved service.

EAST SUFFOLK AND IPSWICH HOSPITAL, Thoro'fare, Ipswich.—Senior House Surgeon, unmarried. Salary £80 per annum, with board, lodging, and washing.

EGYPTIAN GOVERNMENT.—The School of Medicine and the Kasr-el-Ainy Hospital, Cairo. Medical Officers. Applications to the Director-General, Sanitary Department of the Egyptian Government, care of the Secretary, The Examination Hall, Victoria Embankment, London.

GENERAL LYING-IN HOSPITAL, York-road, Lambeth.—House Physician for four months. Salary at the rate of £50 per annum, with board and residence.

GENERAL HOSPITAL, Nottingham.—Assistant House Physician for twelve months. Salary £50, with board, lodging, and washing in the hospital.

GREAT NORTHERN CENTRAL HOSPITAL, Holloway-road, N.—Physician or Surgeon for the Skin Department of the Hospital.

HOSPITAL FOR SICK CHILDREN, Great Ormond-street, Bloomsbury, London.—Two House Surgeons to Out-patients (non-resident) to attend in the Out-patients' Department for six months. Salary £26 5s.

HOSPITAL FOR WOMEN, Soho-square, London.—Registrar for twelve months. Honorarium 25 guineas.

JOINT COUNTIES ASYLUM, Carmarthen.—Second Assistant Medical Officer, unmarried. Salary £100, increasing, if suitable, to £120, by increments of £10 at the end of the first and £10 at the end of the second year, with board, lodging, washing, and attendance.

LONDON THROAT HOSPITAL, Great Portland-street, W.—House Surgeon (non-resident) for six months. Salary £25.

MIDDLESEX COUNTY ASYLUM, Upper Tooting, S.W.—Assistant Medical Officer, unmarried. Salary commencing at £160 (rising £20 per annum to £200) with furnished apartments, board, &c.

NORTHERN INFIRMARY, Inverness.—House Surgeon and Dispenser. Salary £70, with board, &c.

NOTTINGHAM GENERAL DISPENSARY.—Clinical Assistant for six months. Salary £60 for that period, with rooms furnished.

PADDINGTON INFIRMARY.—Resident Clinical Assistant and Second Assistant to the Medical Superintendent for six months. Salary at the rate of £50 per annum, subject to the completion of six months' satisfactory service, and board and residence. Applications to the Clerk to the Guardians, 289, Harrow-road, London, W.

PARISH OF SMALL ISLES.—Resident Medical Officer. Salary £100 per annum. Applications to Inspector of Poor, Island of Eigg, Oban, N.B.

ROYAL BERKS HOSPITAL, Reading.—House Surgeon for six months. Salary at the rate of £60 per annum, with board, lodging, and washing. Also Assistant Medical Officer for six months. Board, lodging, and washing provided, and an honorarium of 10 guineas given conditionally.

ST. MARY, Islington.—Second Resident Assistant Medical Officer, and to act as a Dispenser at the Workhouse and Infirmary, St. John's-road, Upper Holloway, and temporary Medical Officer for the Highgate-hill temporary Workhouse. Salary £80 per annum, and rations, apartments, and washing, subject to statutory deductions. Applications to the Clerk, Guardians' Offices, St. John's-road, Upper Holloway, N.

ST. PANCRAS AND NORTHERN DISPENSARY, 126, Euston-road, London.—Resident Medical Officer, unmarried. Salary £105, with residence and attendance. Applications to the Hon. Sec., 23, Gordon-street, Gordon-square, W.C.

ST. PETER'S HOSPITAL, Henrietta-street, Covent-garden, London.—House Surgeon for six months. Salary at the rate of £100 a year, with board, lodging, and washing.

TOWER HAMLETS DISPENSARY, White Horse-street, London, E.—Resident Medical Officer. Salary £120 per annum, with furnished rooms, coals, gas, and attendance.

UNITED LAW CLERKS' SOCIETY, London.—Medical Officer. Applications to the Secretary, 3, Old Serjeants' Inn, Chancery-lane, W.C.

UNIVERSITY COLLEGE, Sheffield.—Lecturer in Physiology.

UNIVERSITY OF GLASGOW.—Examinership in Physics for three years. Annual fee of £30.

VICTORIA UNIVERSITY (THE YORKSHIRE COLLEGE), Leeds.—Demonstrator of Physiology. Salary £150.

WEST BROMWICH DISTRICT HOSPITAL.—Resident Assistant House Surgeon for six months. Board, lodging, and washing in the hospital. Gratuity £20.

WEST RIDING ASYLUM, Wakefield.—Assistant Medical Officer as locum tenens for ten weeks. Salary £3 3s. per week, with apartments and board.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL, Wolverhampton.—House Surgeon, and to act as Surgical Registrar for one year. Salary £100 a year, with board, lodging, and washing.

Births, Marriages, and Deaths.

BIRTHS.

CLARKE.—On May 14th, at Forgate-street, Worcester, the wife of Fielding Clarke, M.R.C.S. Eng. and R.C.P. Lond., &c., of a son.

COLEMAN.—On May 15th, at Sutton Bridge, Lincolnshire, the wife of J. G. B. Coleman, M.R.C.S., L.R.C.P., of a daughter.

CUSHNY.—At Ann Arbor, Michigan, on May 1st, the wife of Arthur R. Cushny, M.D., Professor of Materia Medica and Pharmacology in the University of Michigan, of a daughter.

FLEMING.—On May 17th, at 37, Hyde Park-gate, the wife of Samuel Fleming, M.B., D.P.H., Barrister-at-law, of a daughter.

GRIFFITHS.—On May 13th, at Trumpington-street, Cambridge, the wife of Joseph Griffiths, M.D. Edin., F.R.C.S. Eng., D.P.H. Camb., of a daughter.

HALL.—On May 14th, at The Priesthills, Hinckley, Leicestershire, the wife of James A. T. Hall, L.R.C.P., L.R.C.S. Edin., of a son.

NAPIER-JONES.—On May 13th, at Ainbank, Plaistow, the wife of P. Napier-Jones, M.R.C.S., L.R.C.P., of a daughter.

NOBLE.—On May 8th, at The Moorings, Grove-road, Walthamstow, the wife of William G. Noble, L.S.A., of a daughter (Ida Kathleen).

PARKINSON.—On May 12th, at Wimpole-street, W., the wife of J. P. Parkinson, M.D., M.R.C.P., of a son.

TOTHILL.—On May 11th, at Staines, the wife of Frederick C. Tothill, M.B., of a son.

MARRIAGES.

SHARP—RAMSBOTHAM.—On May 11th, at St. George's Church, Leeds, Arthur John Sharp, M.D., of Bagdale, Whitby, to Mary, eldest daughter of S. H. Ramsbotham, M.D., Park-place, Leeds.

STANWELL—EVANS.—On May 12th, at St. Martin's, Stamford, by the Rev. Charles Stanwell, M.A., vicar of Ipsden, uncle of the bridegroom, assisted by the Rev. A. Jones, M.A., vicar of the parish, St. John Stanwell, M.B. Ed., M.R.C.S., fifth son of the late William Stanwell, M.R.C.S., of Rochdale, to Alice, third daughter of Daniel J. Evans, of Stamford.

DEATHS.

FLEMING.—On May 13th, at Ash Tree Villa, Walton, Aylesbury, Robert Martin Fleming, L.R.C.S., L.R.C.P. Edin., aged 35 years.

GRANGE.—On May 12th, at Tring, Herts, Frank Grange, M.D. Lond., D.P.H. Cambridge, of Southampton, aged 32.

OATES.—On May 15th, after an illness, John Harrison Oates, M.R.C.S. Eng., L.R.C.P. Edin., Manor Place, Dewsbury.

SMITH.—On May 13th, at Clifton, Opie Bewley Smith, late Surgeon 7th Dragoon Guards, of The Laurels, Nunnington, Hereford, aged 70.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, May 19th, 1898.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Rainfall.	Solar Radiation in Vacuo.	Maximum Temp. in Shade.	Min. Temp.	Wet Bulb.	Dry Bulb	Remarks at 8.30 A.M.
May 13	29·66	N.W.	0·15	107	68	39	42	46	Cloudy
,, 14	29·63	W.	0·09	105	63	40	46	48	Cloudy
,, 15	29·80	E.	0·07	70	55	47	50	52	Raining
,, 16	30·09	N.E.	...	105	59	45	45	48	Cloudy
,, 17	30·17	W.	...	90	59	44	46	49	Overcast
,, 18	30·19	S.E.	...	103	59	44	47	52	Cloudy
,, 19	29·89	N.E.	...	65	49	41	45	47	Raining

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY (23rd).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (2 P.M., Ophthalmic 1.15 P.M.), St. Mary's (2.30 P.M.), Middlesex (1.30 P.M.), St. Mark's (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), Westminster (2 P.M.).

TUESDAY (24th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.), Metropolitan (2.30 P.M.).

WEDNESDAY (25th).—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), St. Mary's (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.), Westminster (2 P.M.), Metropolitan (2.30 P.M.).

THURSDAY (26th).—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (1.30 P.M.), St. Mary's (2.30 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.), Metropolitan (2.30 P.M.).

FRIDAY (27th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), St. Mary's (2 P.M., Ophthalmic 10 A.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.).

SATURDAY (28th).—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 A.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), St. Mary's (10 P.M.), Cancer (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES.

TUESDAY (24th).—ROYAL MEDICAL AND CHIRURGICAL SOCIETY (20, Hanover-square, W.).—8.30 P.M. Mr. J. Lynn Thomas: Two large Vesical Calculi and Nine Calculi removed from the Urethra.

THURSDAY (26th).—HARVEIAN SOCIETY OF LONDON (Stafford Rooms, Edgware-road).—8.30 P.M. Clinical Evening.

FRIDAY (27th).—CLINICAL SOCIETY OF LONDON (20, Hanover-square, W.).—8.30 P.M. Annual General Meeting. Election of Officers for Session, 1898-99. Papers:—Mr. H. Marsh: Case of Primary Sarcoma of the Synovial Membrane of the Knee-joint.—Dr. C. R. Box and Mr. C. S. Wallace: Case of Acute Dilatation of the Stomach.—Dr. H. R. Smith: Seven Cases of Cirrhosis of the Liver in Children.—Dr. G. F. Still: Erythema Enematogenes (Enema Rash) in Children.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

MONDAY (23rd).—LONDON POST-GRADUATE COURSE.—London Throat Hospital, Gt. Portland-st., W., 8 P.M., Dr. Whistler: Syphilis as it Affects the Naso-Pharyngeal Tract.

CENTRAL LONDON THROAT, NOSE, AND EAR HOSPITAL (Gray's Inn-road, W.C.).—5 P.M. Dr. Lennox Browne: Diseases of the Lingual Tonsil, and their Treatment.

TUESDAY (24th).—LONDON POST-GRADUATE COURSE.—Hospital for Skin Diseases, Blackfriars, 4.30 P.M., Dr. Abraham: Lupus.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Bloomsbury).—3.30 P.M. Dr. Ferrier: Lecture.

WEST-END HOSPITAL FOR DISEASES OF THE NERVOUS SYSTEM (73, Welbeck-street).—4.30 P.M. Dr. H. Campbell: Neuralgia and Headache.

WEDNESDAY (25th).—LONDON POST-GRADUATE COURSE.—Parkes Museum, Margaret-st., W., 4.30 P.M., Prof. A. Wynter Blyth: Sources of Water.

WEST LONDON POST-GRADUATE COURSE (West London Hospital, W.).—5 P.M. Dr. Mansell Moullin: Gynæcological Cases.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST (Brompton).—4 P.M. Dr. Kidd: Cases of Pneumothorax.

THURSDAY (26th).—LONDON POST-GRADUATE COURSE.—Central London Sick Asylum, Cleveland-st., W., 5.30 P.M., Dr. S. Taylor: Drugs in Chlorosis.

CHARING-CROSS HOSPITAL.—4 P.M. Mr. S. Boyd: Demonstration of Surgical Cases. (Post-graduate Class.)

THE HOSPITAL FOR SICK CHILDREN (Gt. Ormond-street, W.C.).—4 P.M. Dr. Barlow.

ROYAL INSTITUTION.—3 P.M. Right Hon. Lord Rayleigh: Heat.

LONDON TEMPERANCE HOSPITAL.—2 P.M. Dr. S. Fenwick: Clinical and Lantern Demonstration to Senior Students—Lung Disease.

CENTRAL LONDON THROAT, NOSE, AND EAR HOSPITAL (Gray's Inn-road, W.C.)—5 P.M. Dr. D. Grant: Mastoid Diseases and Operations.

FRIDAY (27th).—LONDON POST-GRADUATE COURSE.—King's College 4 to 5 P.M. Dr. Wilkinson: Tuberculosis and Leprosy.

SATURDAY (28th).—ROYAL INSTITUTION.—3 P.M. Mr. J. A. Thomson: The Biology of Spring.

Notes, Short Comments, and Answers to Correspondents.

EDITORIAL NOTICE.

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side of the paper only, AND, WHEN ACCOMPANIED BY BLOCKS, IT IS REQUESTED THAT THE NAME OF THE AUTHOR, AND IF POSSIBLE OF THE ARTICLE, SHOULD BE WRITTEN ON THE BLOCKS TO FACILITATE IDENTIFICATION.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *should be addressed "To the Manager."*

We cannot undertake to return MSS. not used.

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WILL Subscribers please note that only those subscriptions which are sent direct to the Proprietors of THE LANCET at their Offices, 423, Strand, W.C., are dealt with by them? Subscriptions paid to London or to local newsagents (with none of whom have the Proprietors any connexion whatever) do not reach THE LANCET Offices, and consequently inquiries concerning missing copies, &c., should be sent to the Agent to whom the subscription is paid, and *not* to THE LANCET Offices.

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MEDICAL MARRIAGES.

IT would seem that the ladies who honour the medical profession by making it their own are by no means exempt from the ordinary frailties which beset the human race irrespectively of sex. Love is evidently still able to penetrate the interstices of their scientific panoply and, as usual in like cases, the result is matrimony. At the Madrid Congress the approaching marriage of Dr. Kempner and Miss Susanna Rubinstein, who is an assistant in the Institute for Infectious Diseases at Berlin, was announced; and, according to the French medical press, a similar union is about to take place between Surgeon-Major Castelli of Val-de-Grâce and Madame Chellier, whose distinguished medical career in Algeria has been more than once alluded to in these pages (THE LANCET, Sept. 18th (p. 734) and Nov. 20th (p. 1340), 1897). Dr. Castelli left the Republican Guards in order to join the Madagascar Expedition, where his services earned him the Cross of the Legion of Honour. His bride, who is the first native of Algeria to obtain

the diploma of Doctor in Medicine, is known throughout the wilds of Kabylia as the "tebiba" or female physician. It is in a great measure due to her perfect knowledge of the language that she has been enabled to gain the entire confidence of the uncivilised inhabitants. A French journalist, commenting on this auspicious marriage, says: "If medical ladies do not easily acquire large practices it is, at all events, very pleasant to find them for the most part happily married. At the present moment we can call to mind the names of four practitioners who have selected their wives from the ranks of the medical profession—to wit, Drs. Déjerine, Jacques Bertillon, Sollier, and Pillet."

AN IMPROPER CIRCULAR.

To the Editors of THE LANCET.

SIRS,—May I ask your opinion of the enclosed circular which has been addressed broadcast to my patients and also other medical men's patients in this district. The enclosed copy was handed to me by a patient of mine who had never seen the writer, to say nothing of his having never attended her. I await your next issue (containing your opinion) with interest. I am, Sirs, yours faithfully,

May 13th, 1898. MEDICUS.

[ENCLOSURE.]

DEAR SIR OR MADAM,—It affords me much pleasure to inform you that owing to pressure of work I have been compelled to place a fully qualified medical gentleman to reside at Ll——.

I have secured the services of Dr. S——, who holds the highest credentials, and I feel justified in believing that implicit confidence in him will not be misplaced.

Dr. S—— will reside at Mr. L——'s, station master, A—— House, Ll——.

Either Dr. S—— or I will attend at Mr. R——'s, Post-office, C——, daily, at 3 P.M.

I beg the honour to remain, yours respectfully,

—— ——, M.R.C.S., L.R.C.P.

*** We think the circular an improper one to be sent by any medical man to persons who are not on his own books or his own undoubted patients. The dissemination of such circulars truly makes of the medical profession a trade, and a trade not over particular as to manners.—ED. L.

THE HABITUAL DRUNKARDS ACT.

To the Editors of THE LANCET.

SIRS,—The new Habitual Drunkards Act seems only to provide for the retention of those who do some criminal act, but there are very many habitual drunkards, men and women, whom we ought to have power to put away for their own and others' good, just as we do other lunatics. Cannot something be done to supply this omission?

I am, Sirs, yours faithfully,

Harley-street, W., May 15th, 1898. HEYWOOD SMITH.

THE LITERATURE OF TROPICAL DISEASE.

To the Editors of THE LANCET.

SIRS,—Will some of your readers who have served in the West Indies and in India refer me to the best English works on diseases of tropical climates? I have Scheube in German, and Laveran, De Brun, and Roux in French, and only Maclean's Diseases of Tropical Climates in English. As our army is likely in the near future to get a taste of campaigning in the tropics I should much like to read the best English works on the subject. Especially would I like to be referred to some work or works on military hygiene suitable for a combatant officer unacquainted with tropical service.

I am, Sirs, yours faithfully,

Troy, N.Y., April 23rd, 1898. WILLIAM WOTKYNS SEYMOUR.

"THE JOHN PAGE HENTSCH APPEAL."

To the Editors of THE LANCET.

SIRS,—I beg to acknowledge the sum of 3 guineas from Sir T. Smith, Stratford-place. The total amount received is £34 2*s.* 6*d.* In closing the list I beg to convey the thanks of the widow to those who have forwarded donations and to you for the use of your valuable space.

I am, Sirs, yours faithfully,

410, Brixton-road, S.W., May 17th, 1898. G. DAVID KNIGHT.

TO WEARERS OF THE PINCE-NEZ.

To the Editors of THE LANCET.

SIRS,—It may be always worth while to take note of even a minor accident to the eye, more especially when this may as easily be a serious one as it is preventable. Within my own experience I have more than once met with cases in which more or less damage has resulted to the eyeball or external canthus by the dragging up against it of the bar which projecting backwards from the frame of the ordinary pince-nez serves to keep them folded. Of course one is aware that this accident must be more likely to occur when a cord is worn as usual and also that it cannot happen with some forms of pince-nez; but it seems to me a pity that the more common form of glasses worn should not be rendered incapable of inflicting such an injury by this bar being placed in front of the folder instead of at the back, where, I take it, it would be quite as efficient. The simplicity of the mode in which the injury may occur and of its remedy may justify this note.

I am, Sirs, yours faithfully,

May 18th, 1898. M.D. LOND.

PUERPERAL ECLAMPSIA.

To the Editors of THE LANCET.

SIRS,—I shall be obliged to any of your readers for references to puerperal eclampsia occurring at an early period in pregnancy and at a late period after delivery. I am, Sirs, yours faithfully,

May 18th, 1898. R. C.

THE NOTORIOUS QUACK TOWNSEND.

"PROFESSOR" W. H. TOWNSEND is well known in the west of England. He apparently finds that the demands of his "practice" are too much for him to carry on alone and he has therefore had the insolence to write to a firm of medical agents the following letter. We need not say that the agents refused to have anything to do with him.

[COPY.]

King Alfred Temperance Hotel, Taunton,

April 21st, 1898.

DEAR SIRS,—Can you place me in communication with a Lady Doctor who is disengaged and who is anxious to be employed in a large practice? Kindly let me know by return. I enclose two or three articles which you may enclose in any letter you may write for me to a Lady Doctor. Her age must be 23, 24, or 25, and please state her experience, &c., if you write me for any Lady.

Yours truly,

(Prof.) W. H. TOWNSEND.

You may place me in communication with a Gentleman Surgeon, M.R.C.S., as well. I have not quite made up my mind who to engage yet.

"Professor" Townsend enclosed a circular with sundry excellent maxims at the head, of which we recommend the following one to those who consult him: "Who knows not and knows not that he knows not is a fool—shun him." We do not suppose that the "Professor" will get either a "Lady Doctor" or a "Gentleman Surgeon."

Subscriber (Brighton).—1. We think that such pamphlets when freely circulated to the public should not bear the name and medical titles of the medical officer. We note, however, that in this particular instance the address is properly absent. 2. The committee should, of course, consult their medical man. 3. If he objects to the publicity they should not publish his name.

Telegraphs.—Our correspondent can get information concerning the colonial medical appointments by making inquiry at the Colonial Office. There are always many applicants for the pleasanter berths, but the pay is not good. Concerning the telegraph ships we advise him to write to Messrs. Siemens Bros. and Company, Limited, of Woolwich, Kent.

M.R.C.S., L.R.C.P., and several others.—We saw the curious error, of course. It was in the majority of the papers, great and small. Considering what are the characteristics of Cheyne-Stokes breathing we think the blunder resulted in a fortunate expression.

B. A. M. gives no permanent address. The system of which he writes is a quack system which cannot be too highly condemned as dangerous and ineffective. He should consult his medical man.

L.R.C.P. has himself named the best treatises. We have nothing to add to his list, but we are doubtful whether it would be wise to embark on such an exhaustive course of reading all at once.

An Old Subscriber is strongly recommended not to give the testimonial in question unless he receives a guarantee that it will not be used as a public advertisement of the article.

R. F. W.—Jamieson's "Diseases of the Skin" is quite suitable. Malcolm Morris's "Diseases of the Skin" is also a very good little book.

R. J.—We do not think the information is forthcoming, but application might be made to the Registrar-General.

Verax.—We have nothing to add to our former answer.

During the week marked copies of the following newspapers have been received: *Dewsbury Reporter, Sheffield Telegraph, Newcastle Leader, New Ross Reporter, Southampton Times, Weston-super-Mare Gazette, Leicester Post, Ayrshire Post, Oban Times, Times of India, Pioneer Mail, Shipping Gazette, Hastings Times, Worthing Gazette, Lowestoft Standard, Westmeath Examiner, New Age, Builder, Manchester Courier, Liverpool Daily Post, Glasgow Herald, Citizen, Architect, Scotsman, Bristol Mercury, Sussex Daily News, Tonbridge Telegraph, Eastern Daily Press, Salisbury Journal, Southampton Observer, Yorkshire Post, Eastern Morning News, Norfolk Chronicle, Birmingham Gazette, Derby Express, Leicester Express, South Wales Daily News, Leeds Mercury, Brighton Gazette, Sanitary Record, Mining Journal, Local Government Chronicle, City Press, Reading Mercury, Hertfordshire Mercury, Local Government Journal, Derbyshire Times, Surrey Advertiser, Grimsby News, Bedfordshire Advertiser, Clifton Chronicle, Banffshire Advertiser, European Mail, Burton Chronicle, Kelso Mail, Tyrone Constitution, Malvern News, Essex Newsman, Thanet Guardian, Alnwick Gazette, Devizes Gazette, West Middlesex Herald, &c., &c.*

Communications, Letters, &c., have been received from—

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Y.—Yöst Typewriter Co., Lond.; Yorkshire College, Leeds, Secretary of.

Z.—Zeno, Brooklyn, N.Y.

Letters, each with enclosure, are also acknowledged from—

A.—Mr. S. E. Atkins, Pinhoe; Mr. B. H. Andrew, Haddenham; Ariel, Lond.; A. H. B.; A. G. T.; A. H. W. A.; A. C.; A. H. P.

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